

DOCUMENT RESUME

ED 438 845

IR 057 672

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TITLE Rockford Public Library's Circulation Services: A Work Flow Analysis and Spacial Analysis Study with Recommendations and Comments.
PUB DATE 1999-11-00
NOTE 160p.; Report funded by the FY99 Library Services and Technology Act "Bring an Expert" grant administered by the Illinois State Library.
PUB TYPE Reports - Evaluative (142) -- Tests/Questionnaires (160)
EDRS PRICE MF01/PC07 Plus Postage.
DESCRIPTORS Content Analysis; Interviews; *Library Circulation; Library Personnel; Public Libraries; Questionnaires; *Spatial Relationship (Facilities)
IDENTIFIERS Illinois (Rockford); Site Visits; *Work Flow

ABSTRACT

The purpose of this project was to perform an analysis of the Rockford Public Library (Illinois) circulation services department and provide recommendations leading to customer service improvement, better space utilization, and improved departmental work flow. Based on an analysis of input from individual interviews with staff, review of departmental policy and procedures manuals, and observations from site visits, the authors conducted three types of analysis: (1) a work flow analysis; (2) a content analysis of interview comments; and (3) observations from multiple site visits. This report presents recommendations and comments related to communications, ergonomics, operational/procedural, security, spacial/visual, and training. Appendices include a table of tasks done as reported by interviewees, the interview questionnaire, and data flow diagrams. (MES)



Rockford Public Library's Circulation Services:

A Work Flow Analysis and Spacial Analysis Study with Recommendations and Comments

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November 1999

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*Rockford Public Library's Circulation Services: A Work Flow and Spacial
Analyses Study with Recommendations and Comments.*

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*Funded by: Illinois State Library
 FY99 Library Services and Technology Act
 "Bring an Expert" Grant*

November 1999

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Acknowledgments

The consultants would like to personally thank Joel Rosenfeld, the Director of Rockford Public Library, and the Illinois State Library for the opportunity to conduct this project under funding provided by the FY99 Library Services and Technology Act "Bring an Expert" grant. We also would like to extend our sincere appreciation to Dawn M. DiVenti, Circulation Services Manager and her entire circulation staff for their enthusiasm and willingness to share information with us on their work tasks and departmental operations.

PURPOSE OF THE PROJECT

To perform an analysis of the Rockford Public Library's circulation services department and provide recommendations leading to customer service improvement, better space utilization, and improved departmental work flow.

BRIEF DESCRIPTION OF PROJECT ACTIVITIES

Based on an analysis of input from individual interviews with staff, reviewing departmental policy and procedures manuals, and observations from site visits Dr. Elizabeth Titus and Wallace Grant conducted three types of analysis.

Work Flow Analysis- The staff that were interviewed were asked to describe what tasks they performed. A standard set of questions were asked of all the staff interviewed. See Appendix A. This information was used along with information from reviewing written departmental documents to create work flow diagrams. See Appendix B and Table 1. The work flow diagrams were reviewed and analyzed. Based on this analysis, recommendations were formulated.

Content Analysis of Interview Comments-The staff that were interviewed were asked to make any suggestions, observations, or comments on how to improve customer services or their work. A content analysis was done on the comments made. Based on this analysis, some recommendations were formulated. See *RECOMMENDATIONS AND COMMENTS* section of this report.

Observations from multiple site visits- Several site visits were made to observe the physical environment in which work tasks were performed, see how traffic flowed in the service area, view the existing signage systems, and obtain a spacial perspective. Based on observations made from these site visits, some recommendations were formulated. See RECOMMENDATIONS AND COMMENTS section of this report.

TIMETABLE OF ACTIVITIES

The timetable of activities given below provides you with information on when the various activities associated with this study were done.

December 1998- Dawn M. DiVenti and Dr. Elizabeth Titus met to informally discuss the feasibility of conducting a work flow analysis and work space analysis of the main library's circulation services at Rockford Public Library.

June 1999- Rockford Public Library was awarded an Illinois State Library FY99 Library Services and Construction Act "Bring an Expert Grant" to improve customer services for patrons using its main library's circulation services.

July 1999- Dawn DiVenti, Dr. Elizabeth Titus, and Wallace Grant met to discuss information requirements, scheduling of interviews, timetables, etc. associated with doing a work flow analysis of the main library's circulation services.

September 14, 1999- An overview of the process of doing a work flow analysis and individual interviews was presented by Dr. Elizabeth Titus and Wallace Grant to the main library's circulation services staff.

September 30, 1999- Dr. Elizabeth Titus and Wallace Grant conducted interviews with 18 members of the circulation services staff.

October-November- An analysis of data from interviews with staff, document on circulation services operations, observations during site visits etc. was done to produce work flow diagrams, charts, and make recommendations on ways to improve work flow, reduce redundancies, and improve customer services.

Based on the above analysis, a written report and an oral presentation of recommendations and findings was made to Joel Rosenfeld, Director and Dawn M. DiVenti, Circulation Services Manager.

RECOMMENDATIONS AND COMMENTS

COMMUNICATIONS

1. Develop a communication mechanism which permits more timely exchange of information that is needed by staff to do their jobs.

Comments: There are a number of existing mechanisms in place which allow staff to exchange information including monthly staff meetings and routinely scheduled quality circle meetings. However, these modes of communication with staff are not timely for purposes of communicating when changes are occurring rapidly. Word of mouth is used, but verbal communications do not always reach all staff, especially when staff schedules vary greatly. Some suggested ways to strengthen staff communication channels include the following:

- a. Designate an individual as the "information officer". This is the individual who should be contacted and kept informed. All staff would be instructed to contact this individual for information.
- b. Keep a daily log book at the service desk. Staff can write down information that needs to be communicated to other staff. All staff would be responsible for checking the log book as part of their daily routine.

c. Decide collectively as a group how information organizationally would be shared with the group and then establish your expectations for staff in using the agreed upon information channels. For example, if E-mail is the way information is to be distributed, then all staff would be expected to check their E-mail on a regular basis.

d. Post time sensitive information in a central location, rather than routing it.

ERGONOMICS

1. Consider purchasing new chairs for staff who work at the circulation services counters.

Comments: Staff work at the counter areas for long periods of time. They need chairs which are comfortable for sitting long periods time, as well as being ergonomically correct.

OPERATIONAL/PROCEDURAL

1. Instead of having the patron go to the proper circulation point for service, have the services come to the patron at a single point. Provide "one stop full service".

Comments: If you do an analysis of the tasks done as reported by interviewees, many of the staff are trained in check-in, check-out, registration, av, and customer service. See Table 1. This is because they either are assigned to one or more of the areas as a primary assignment or as a back-up. In effect, they already are familiar with procedures for multiple service points. In order to make this transition, changes in the way services are provided would have to be done and include the following:

- a. Staff assigned to provide circulation services would have to be trained to provide full service to the patrons they serve. Rather than directing patrons to other service areas, they would retrieve av materials, instruct patrons on how to fill out a registration form, issue cards, retrieve items for patrons requested from other libraries, etc.
- b. Similar to banks, stores, etc. patrons would be directed to a circulation terminal site for full service. It might be desirable to have one terminal site designated as a fast check-out site. In terms of long term planning, the installation of a self-checkout terminal may enhance existing services and improve customer services.

2. Consolidate reserves, holds, and interlibrary loans items waiting to be picked up into one area. Arrange the items waiting to be picked up by the patron's last name.

Comments: With a centralized pick-up point, the patron only has to indicate that they have been notified items they requested have come in. They do not need to know whether it is a reserve, hold, or interlibrary loan. For staff, locating items to be picked up will be more efficient, if centralized and arranged by the requestor's name.

3a. For the short term, change the manual application forms maintenance procedures to reduce the amount of time required to purge expired cards. File first by card expiration date and then numerically by card number within each expiration date grouping.

Comments: By filing by card expiration date, you would eliminate the need for staff to search through large sets of files on an ongoing basis.

3b. For the long term, investigate whether or not your new circulation system will permit you to entirely automate the task of purging records based upon an expiration date field.

Comments: Automating this function would be efficient and significantly reduce the amount of staff time needed to perform this task.

4. Change address verification procedure.

Comments: Simplify the procedure. Just routinely ask patrons when checking out materials if their address is current and correct. Update records electronically as needed. State law requires that addresses be verified no less than every third year. Since the above procedure would be done on an ongoing basis, the library would be in compliance with the state law. This procedure would eliminate the need to handle paper files.

5. Centralize all circulation's information delivery functions (ILL, NILSCAT, HOLDS, and RESERVES). Have a limited number of staff process/handle all information delivery requests regardless of the provider source (internal or external).

Comments: Information delivery service functions tend to be detail oriented and require a fairly high level of training in order to be proficient. There is too much fragmentation the way the current information delivery services are structured. Information delivery services needs to be simplified and made more user friendly. All these functions (ILL, NILSCAT, HOLDS, and RESERVES) are interrelated. Via centralization of information delivery functions, the patrons needs can better be met. If one information delivery avenue does not work out, other information delivery avenues can be tried automatically.

6. Stop issuing library cards with photos on them. Issue library cards without photos on them.

Comments: To issue library cards with photos on them is costly and labor intensive. The library has to purchase special equipment (computers and photo equipment) for all the libraries. Patron information has to be entered into two computer systems. Substantial savings in equipment and human resources could be made by issuing library cards without photos. It is suggested that the benefits of having library cards with photos on them does not offset the substantial costs associated with having them. Patrons would also benefit by changing to a simpler, less costly system. Costs and the time required for new card processing or card replacement would be reduced.

7. Make it more convenient for patrons to pay fines or fees when they exceed a certain amount.

Comments: Allow patrons to pay fines or fees using a debit card or visa card when fines or fees exceed an operationally "cost effective" amount, e.g. over \$10.00. A debit card system would contribute to reducing the amount of money being handled.

8. Simplify and automate scheduling procedures.

Comments: Instead of having four people do scheduling, only have one person do all scheduling. Replace the DOS-based software being used with software that has more sophisticated scheduling features. Consider having quarterly schedules rather than monthly.

SECURITY

1. Eliminate the cash register located on the main circulation counter.

Comments: By having only one cash register, you can reduce the amount of time spent opening/closing registers, cash accounting, and actual handling of cash by 50%. Potential for "snatch and grab" theft of cash is substantially reduced.

SPACIAL/VISUAL

1. Increase the amount of open counter space in circulation services by installing a literature rack in a single location where brochures, program announcements, etc. can be placed. Discontinue having brochures, program announcements, etc. distributed from the counter areas in circulation services.

Comments: Currently, brochures, program announcements, etc. for dissemination to the public are put on the circulation services counter tops. Two problems occur. First, the service desk becomes cluttered. Second, less counter top space is available for patrons being serviced. By having a central location for literature, brochures, etc. at least three improvements are made which are as follows:

- a. Eliminates desktop clutter at the circulation department's service desks.
- b. Regains counter top space for use by patrons being serviced.
- c. Creates a centralized and specific location for the dissemination and finding printed information on library programs, services, etc. If a patron wants printed information, they know where to find it.

2. Change work flow patterns for book return processing tasks during "high return" times to reduce cart gridlock and work area congestion.

Comments: Normally, libraries provide shelving sorting space and purchase book carts to meet normal work flow demands. To prevent cart gridlock and work area congestion you may need to establish different work flow patterns during high book return cycles. Some recommended approaches include the following:

- a. Identify when the library is in a "high return" time period. All units doing shelving would be expected to get books shelved and carts returned to the circulation department faster. In effect, it would be a library wide priority.

b. During "high return" time periods, make getting books discharged and back on the shelves one of the highest circulation department's priorities. Everyone does it until the backlog is caught up.

c. Look at your scheduling patterns. It may be more efficient to do book discharging earlier/later in the day when the system is not a peak load time. If those doing book discharging are working "normal" schedules, you may want to rethink when they work.

3. Reduce the number of audiovisual materials that are kept in a controlled circulation environment to achieve greater space and collection management efficiencies.

Comments: The behind the circulation storage space for the audiovisual collections is overcrowded and decentralized. This creates work flow problems. Instead of storing all AV materials behind the circulation desk, store only those that have circulated within a specified time frame. If an item has not circulated within this determined time period e.g. 6 months, it would be housed in the library's storage area and retrieved on request. When the item circulates it is relocated to the behind the desk area.

4. Unclutter the main entrance and approach to the circulation service desk area to simplify and reduce the number of visual messages being transmitted to patrons. The following changes are recommended:

a. "De-sign" the area. There are too many overhead signs in the area. Behaviorally, when there are too many signs, people tend to ignore them. It is too confusing.

b. Open up the main entrance, the main elevator area, and the front circulation service desk area by removing all the book carts, book displays and pedestals/ropes. Do not impede traffic flow by having physical barriers in the way.

TRAINING

1. Provide in-depth training to staff which focuses on ways to improve how they relate to patrons.

Comments: Interview feedback indicated staff would like to further develop their skills in talking with patrons, dealing with angry patrons, and being more caring/helpful to patrons.

OTHER

Below is a listing of issues identified during the interview process that were not incorporated into the recommendations above, but are noted for your review and consideration.

1. Concern that the number of items an individual is permitted to check out (50 items) is too much.
2. Concern that there is a way to "beat the system" when high dollar amounts for overdue fines build up on a card. For example, an adult builds up large overdue fines on their card and then asks another family member to use their card to check out books for them.
3. Concern that the building is not adequately maintained. Public areas need to be cleaned more routinely.
4. Make things easier to find. Have specific places for things and then keep things in place.
5. Do not have empty shelves. If they are empty, they should be used or removed.

Table 1

Tasks Done as Reported by Interviewees

Position	Tasks					
	Check-in	Check-out	Registration	AV	Customer Service	Other
Library Clerk (Part-time)	X	X	X	X	X	
Library Clerk (Part-time)	X (Backup)	X (Backup)	X	X (Backup)	X (Backup)	
Library Clerk (Part-time)	X	X	X (Backup)	X (Backup)	X (Backup)	stamp due date cards
Library Clerk (Part-time)	X (Backup)	X	X	X	X	phone renewals
Library Clerk/Team Leader	X	X	X	X	X	NILS CAT, opening/closing, floor supervisor, reserves backup
Library Clerk	X (Backup)	X (Backup)	X	X		
Library Clerk		X (Backup)		X (Backup)	X	
Library Clerk	X	X		X		
Library Assistant	X	X	X	X	X	stats, opening/closing
Library Clerk	X	X	X	X	X	
Senior Library Clerk	X	X	X	X	X	withdrawals, reserves, scheduling
Library Clerk	X	X	X	X	X	phone renewals
Library Page (AV)	X			X		
Library Page (Storage)	X					department mail run, NILS CAT
Volunteer						stamp due date cards

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Appendix A

Interview Questionnaire

Position title: _____

Task: _____

Input source: _____

What is done to input: _____

Output to: _____

Recommended improvements: _____

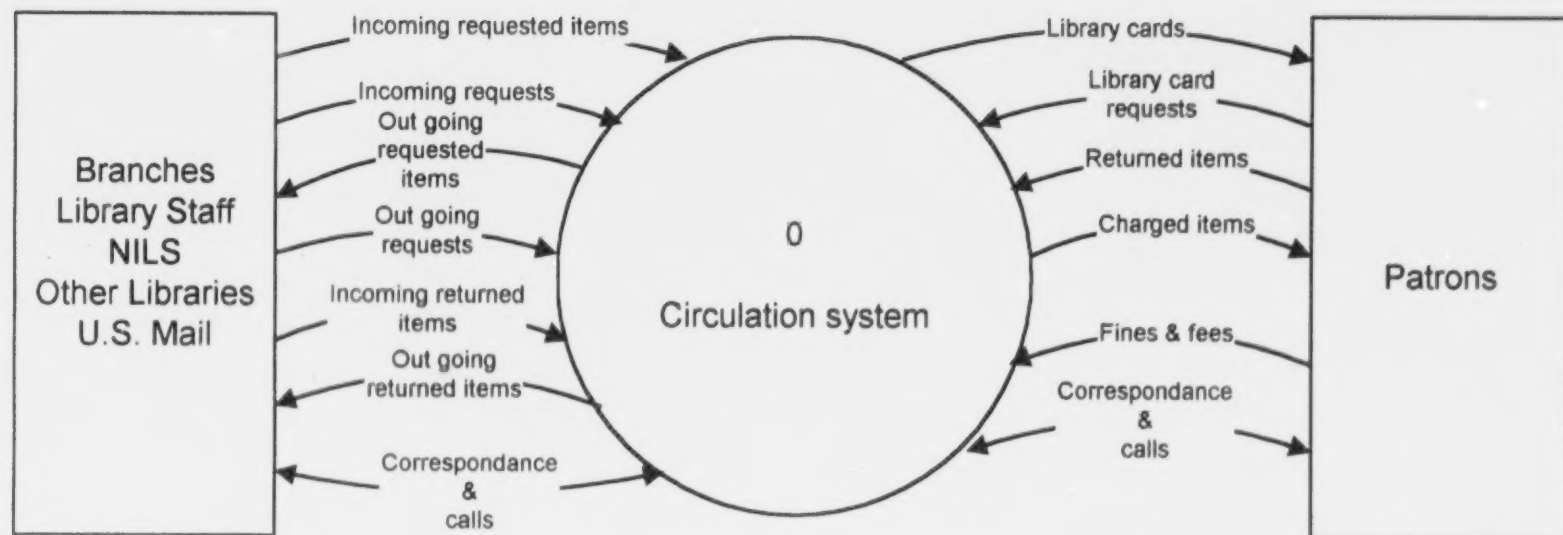
Appendix B

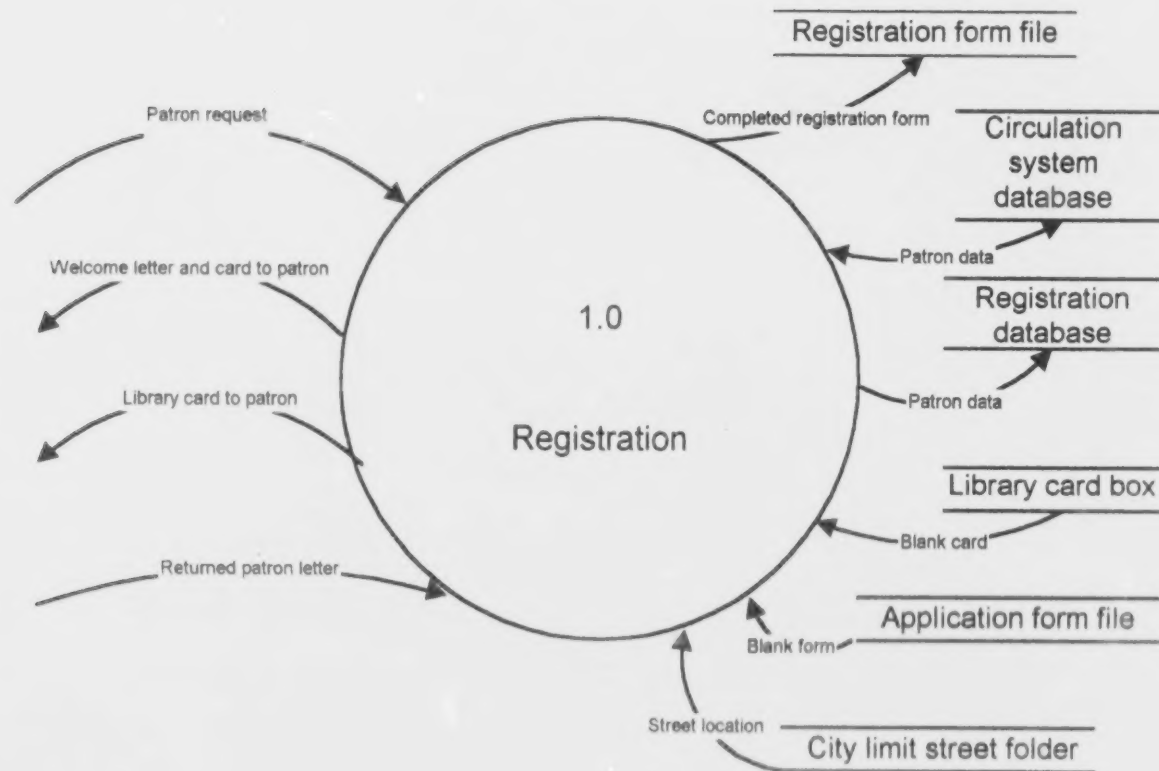
Data Flow Diagrams

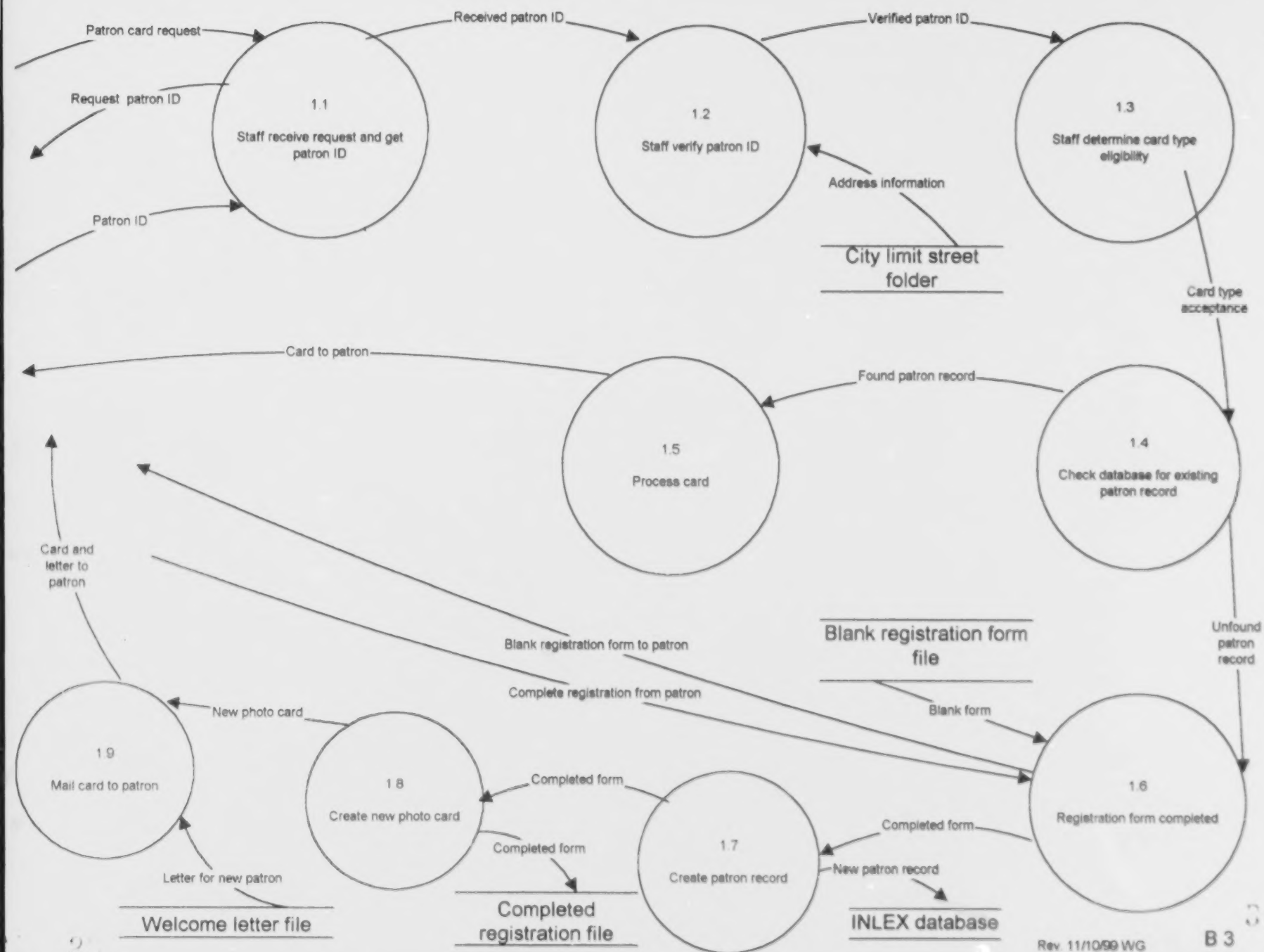
These data flow diagrams develop the logical foundations of a system and describe the process of a particular function and to illustrate the flow of data between functions.

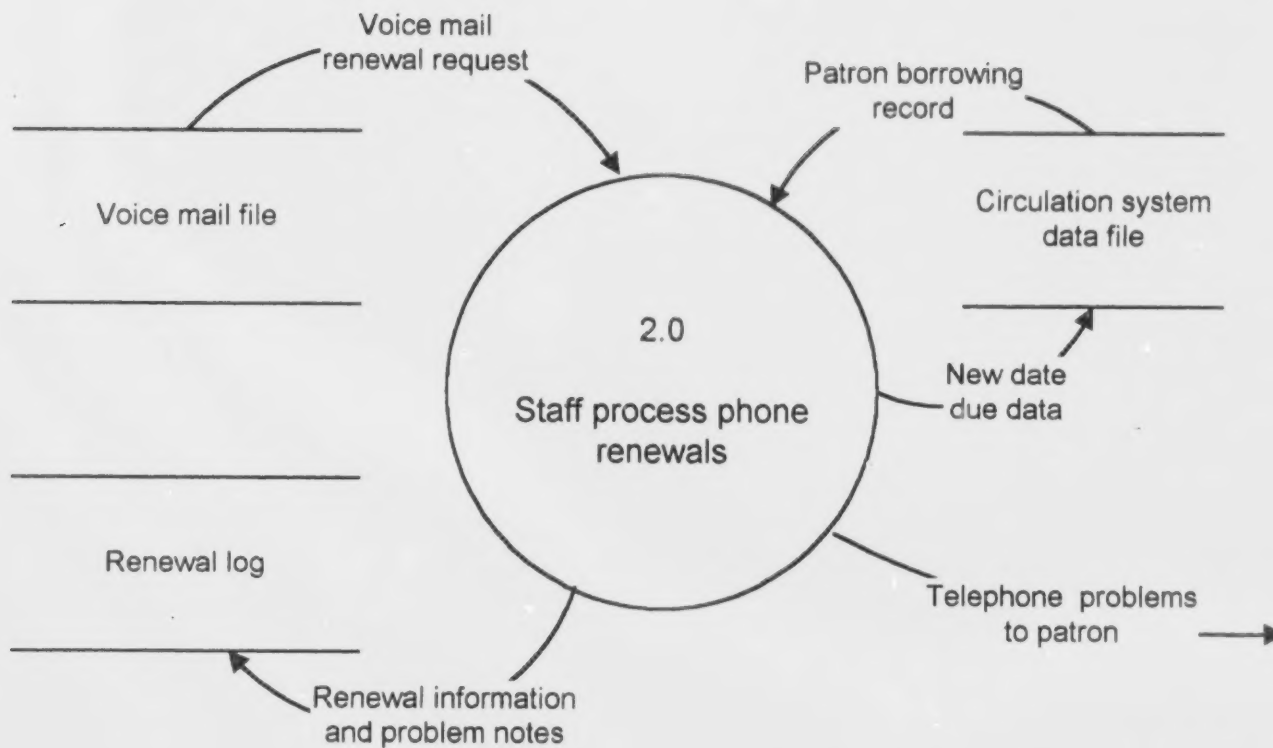
Data Flow Diagram Index

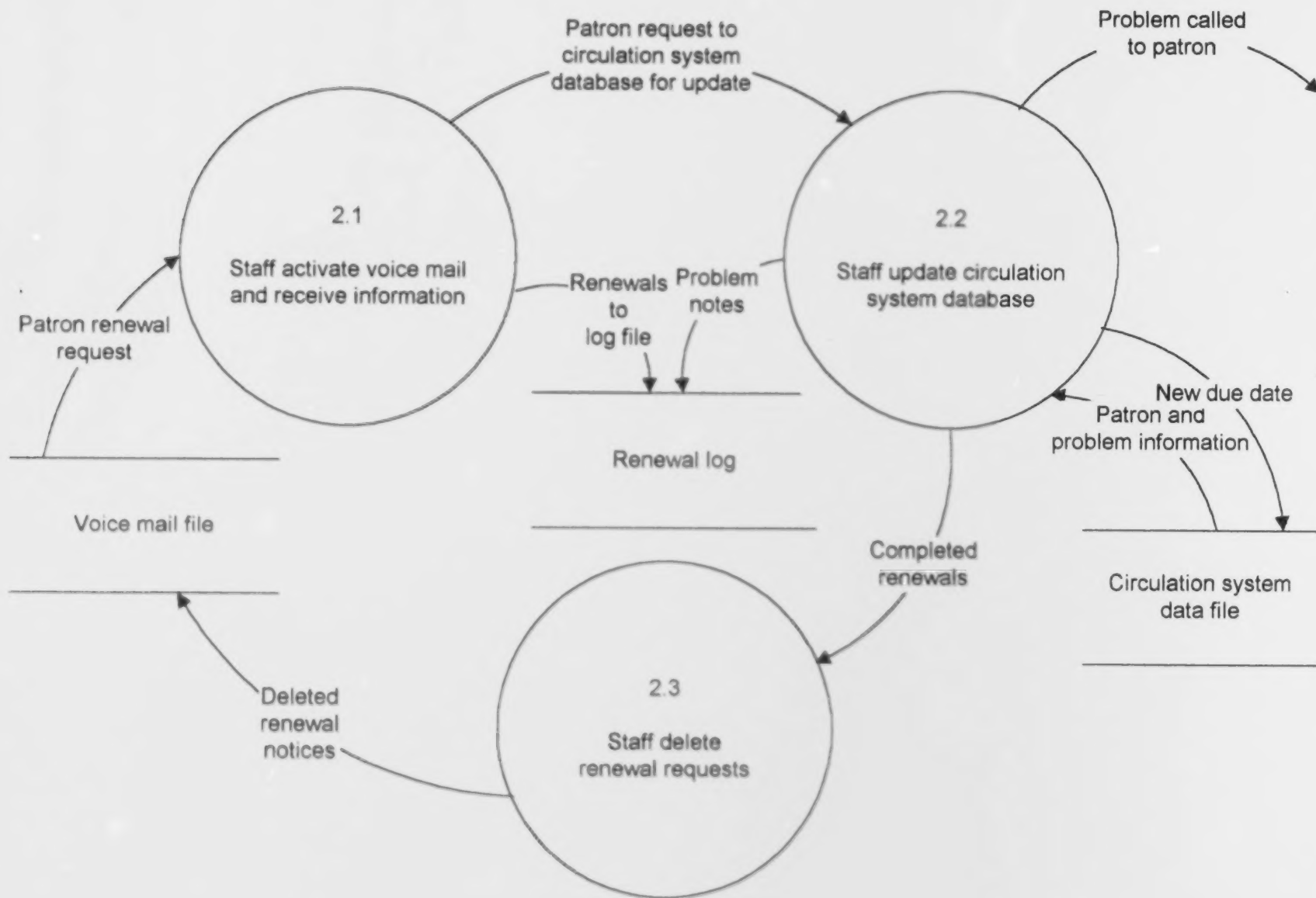
<u>Diagram</u>	<u>Page</u>
0. Circulation System	B 1
1. Registration	B 2
2. Phone Renewals	B 4
3. Registration File Maintenance	B 6
4. Process Date Due Cards	B 8
5. Copier Problems	B 10
6. Process Lost & Found	B 12
7. Charge Out Non AV Item	B 14
8. Process AV Item	B 19
9. Process Returned Book	B 21
10. Process NILS Picklist	B 25
11. Process NILS Delivery	B 27
12. Process Interlibrary Loan	B 29
13. Interlibrary Loan Returns	B 31
14. Process Calls	B 33
15. Who Is In Charge	B 35
16. Paging	B 37
17. Building Problems	B 39
18. Library Program Schedule Question	B 41
19. Open Work Areas	B 43
20. Closing Customer Services	B 51
21. Closing AV	B 53
22. Closing Check Out	B 55
23. Closing Registration	B 57
24. Closing Staff Work Area	B 59
25. Closing Cash Registers	B 61
26. Process Returned Discharged Items	B 63
27. Reserves Processing	B 65
28. Processing Holds	B 67

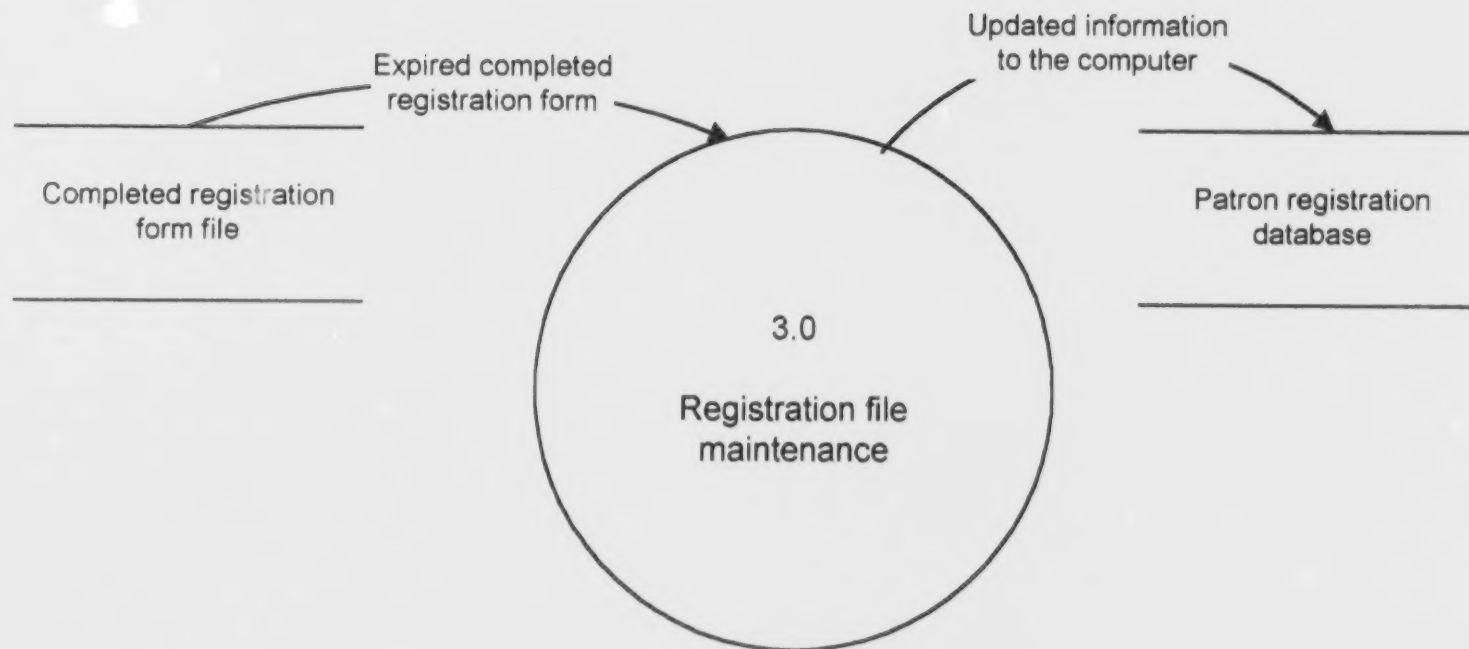












Completed registration
form file

Expired
registration form
for review

3.1
Collect all expired
registration forms

Expired
registration form

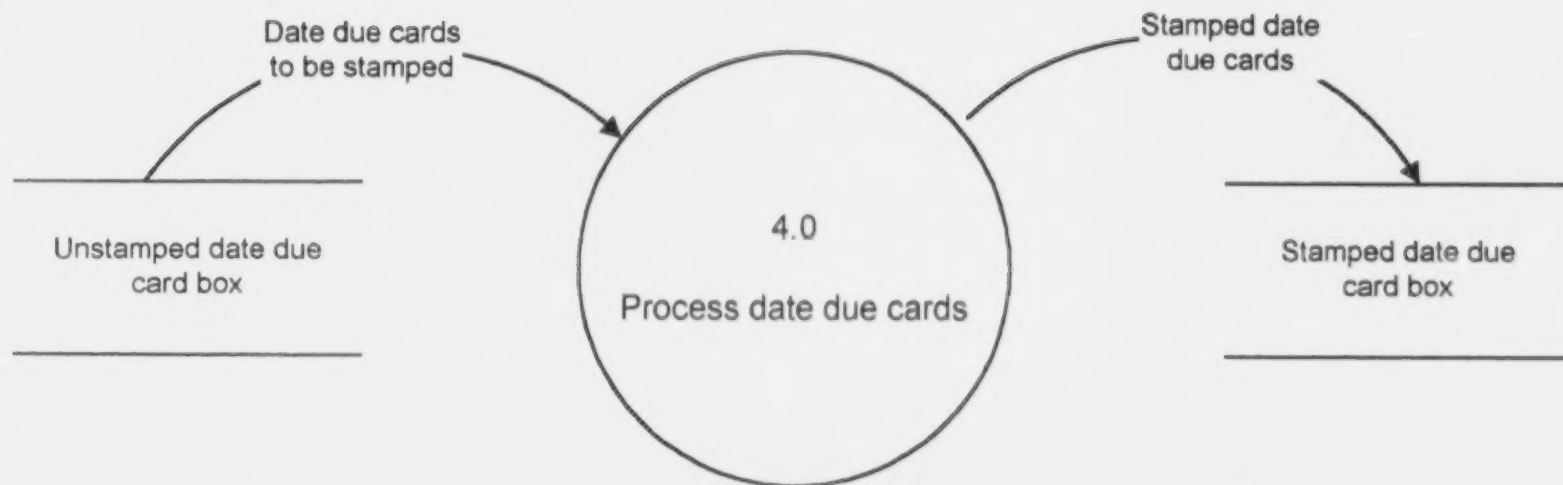
3.2
Update patron
registration database
to remove patrons

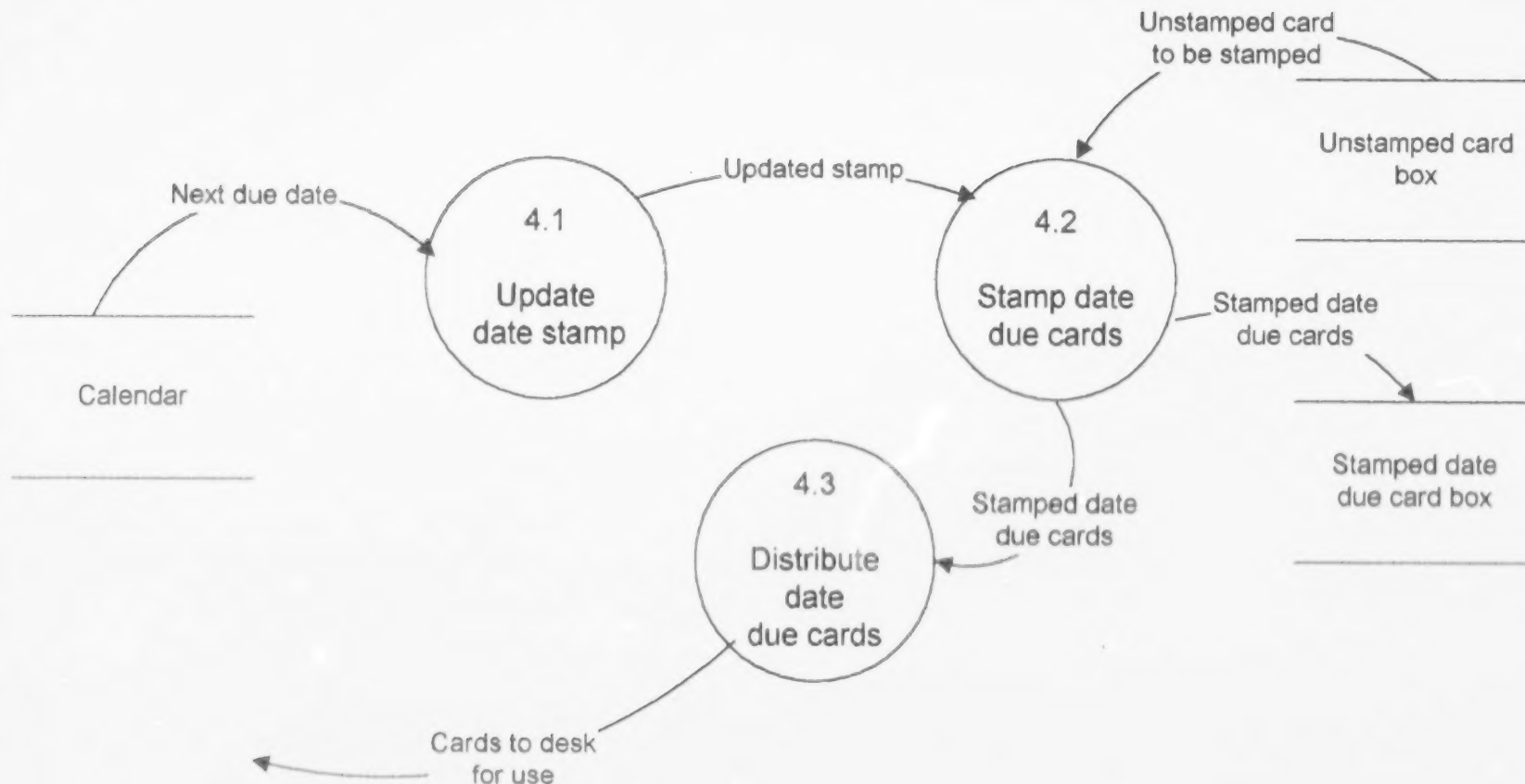
Updated information
to patron database

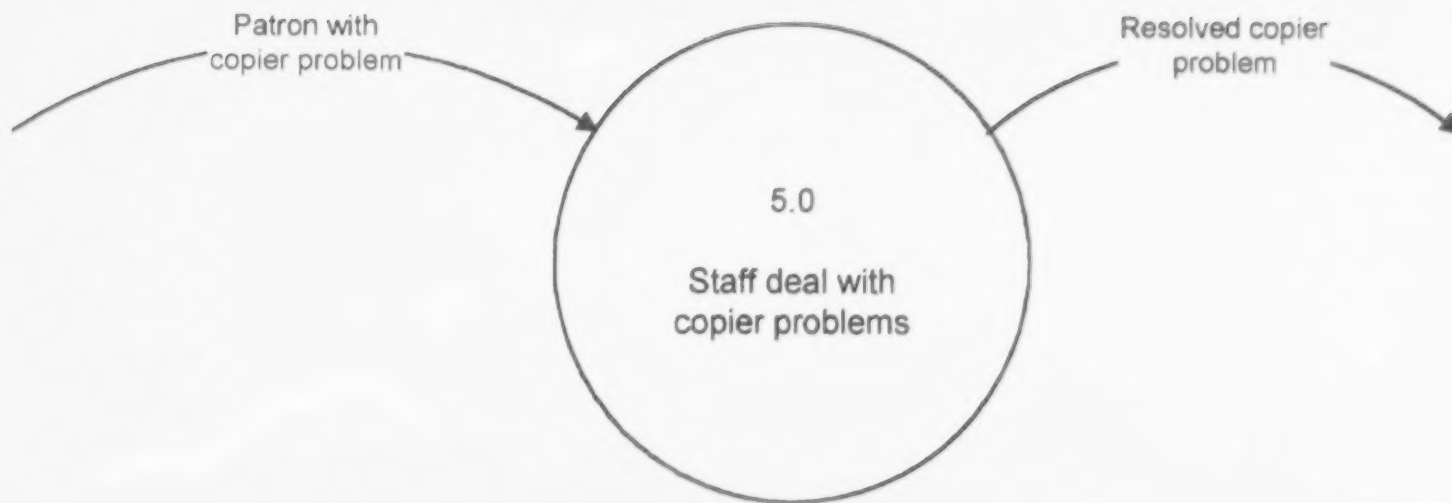
Patron registration
database

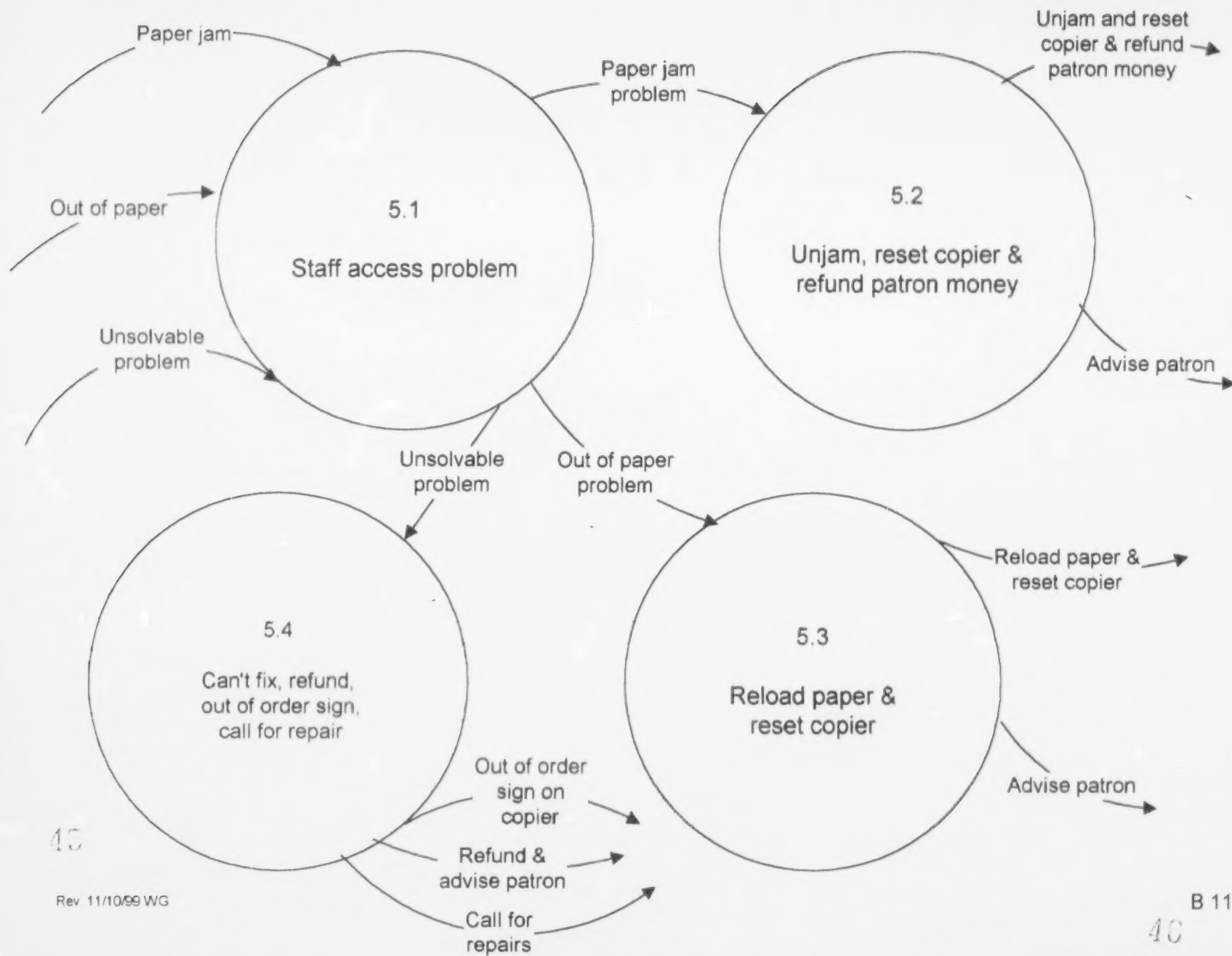
Discard
old files

B 7

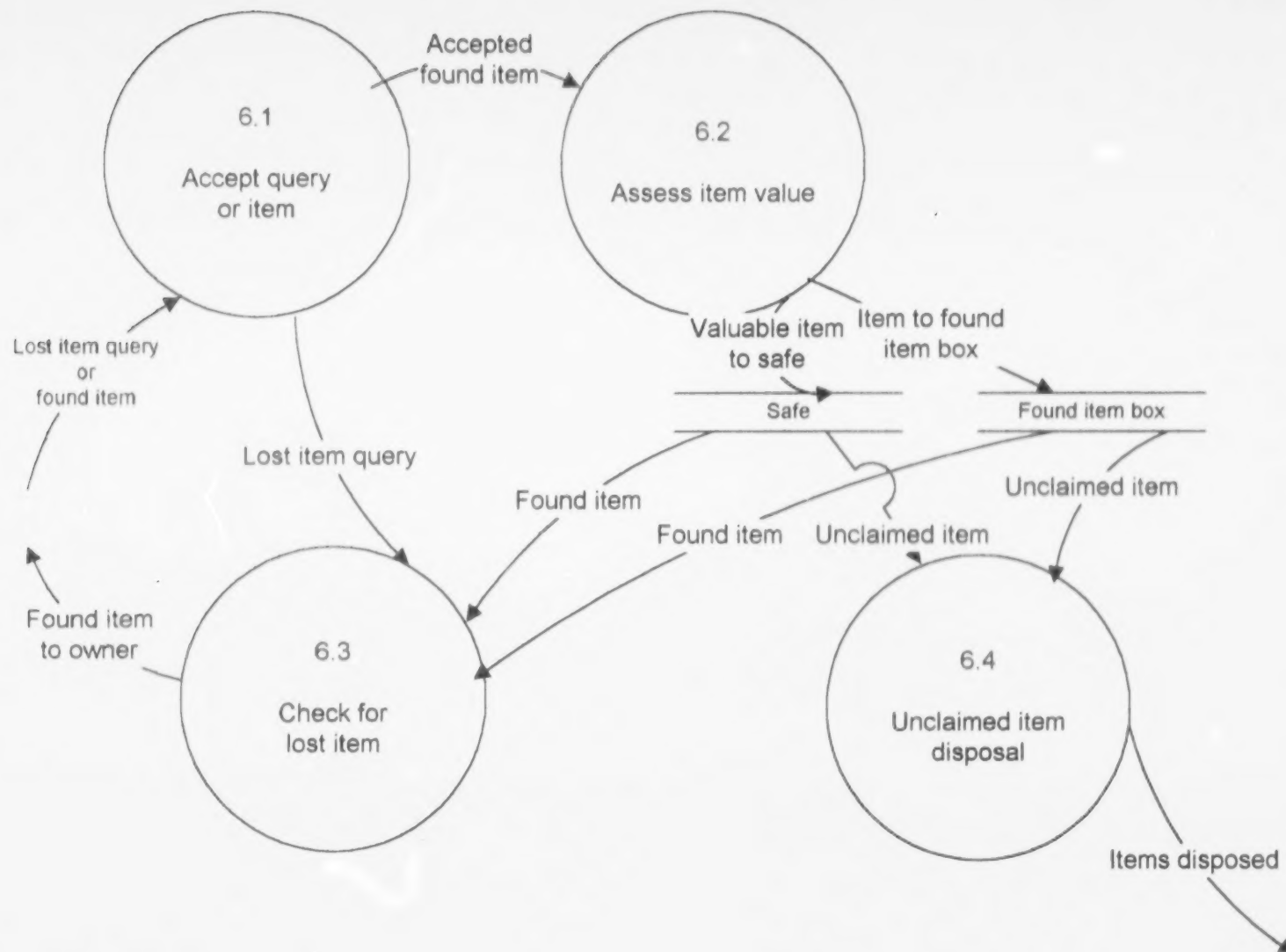


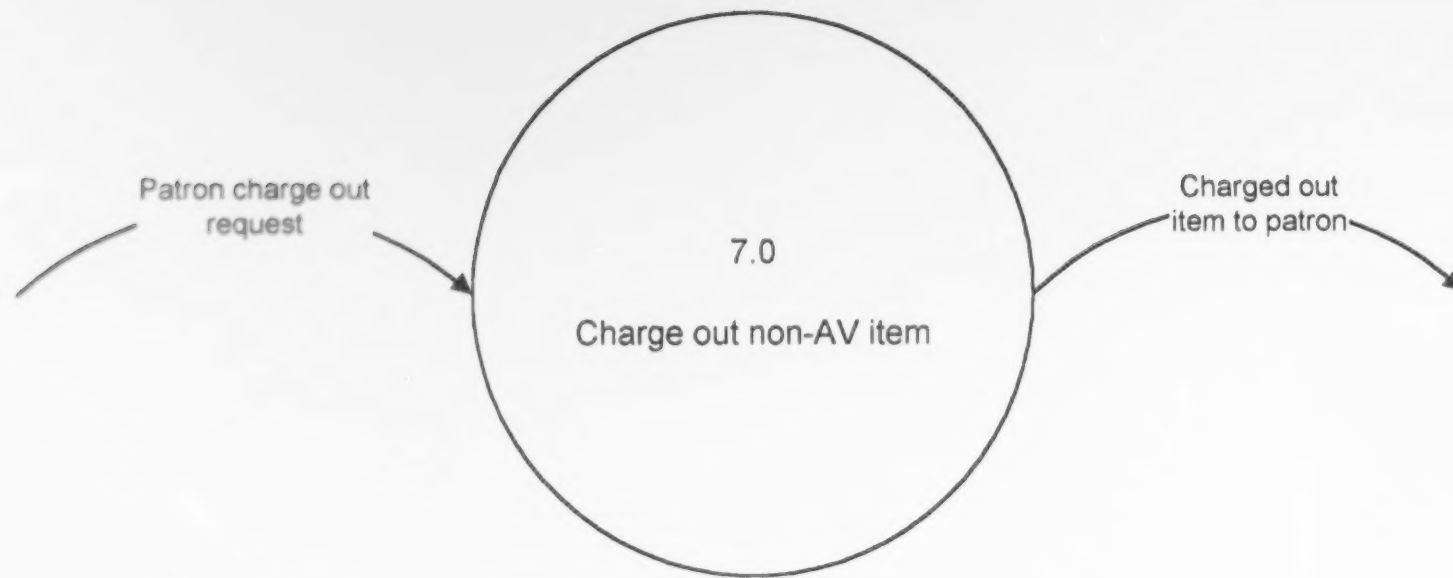






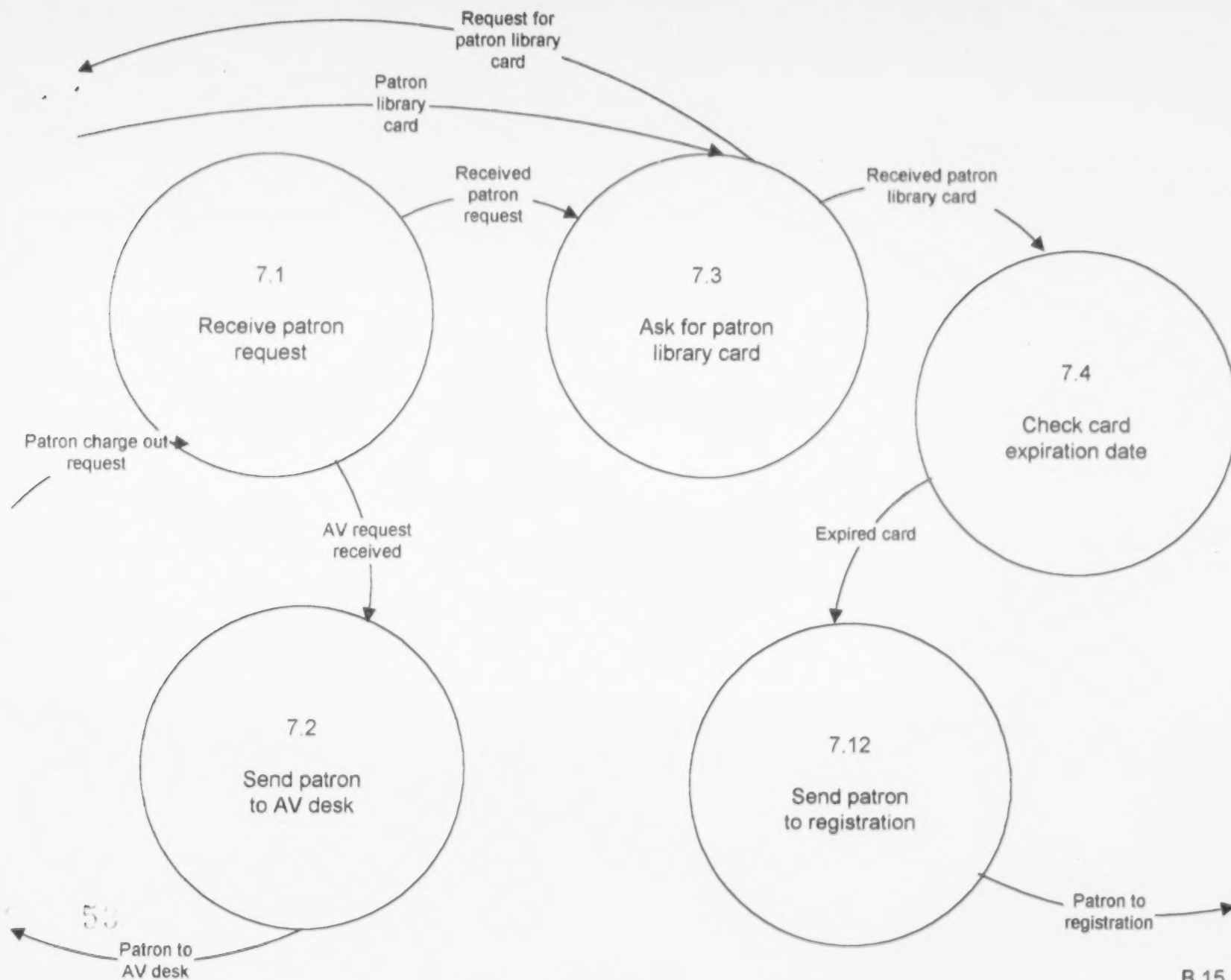


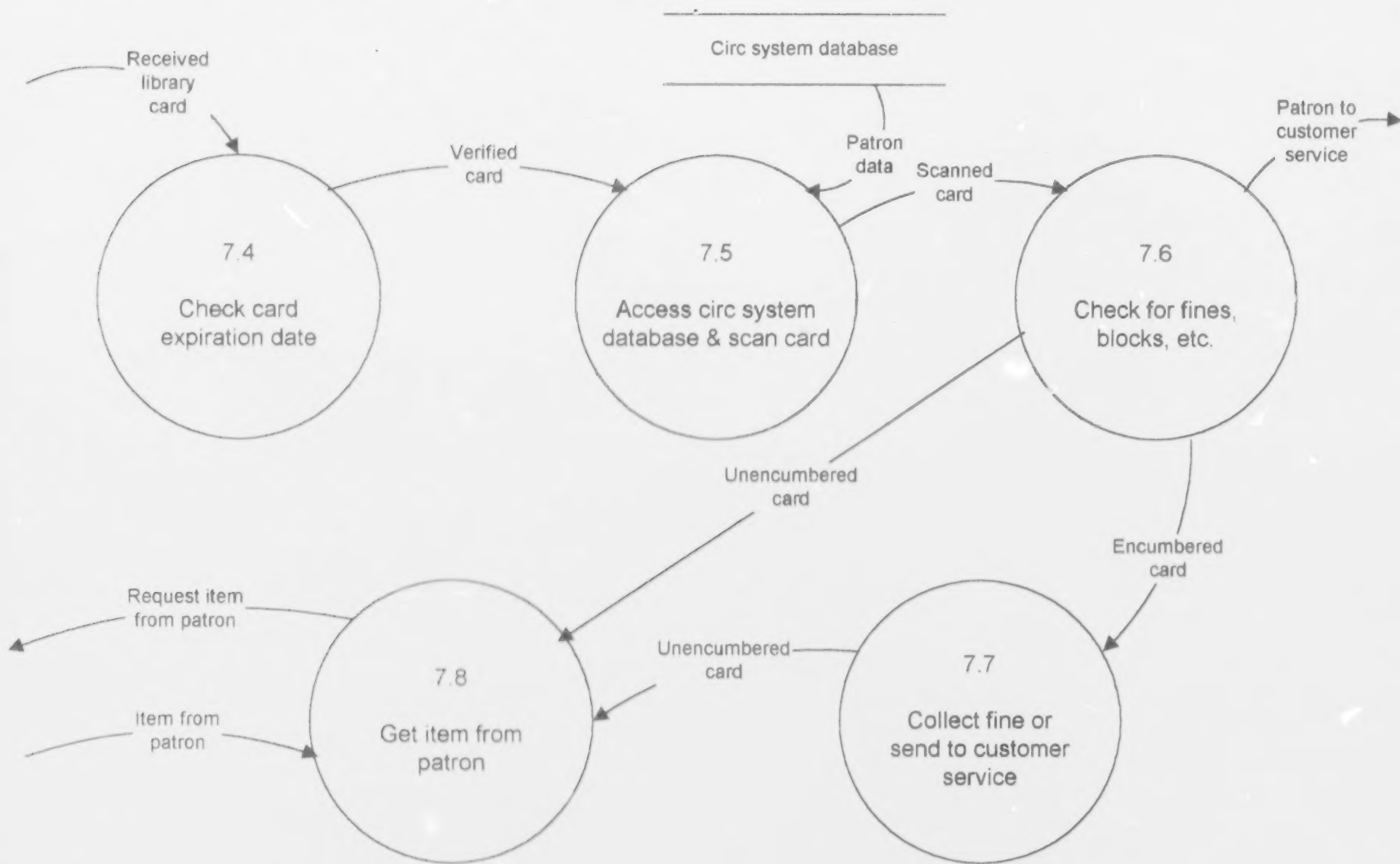


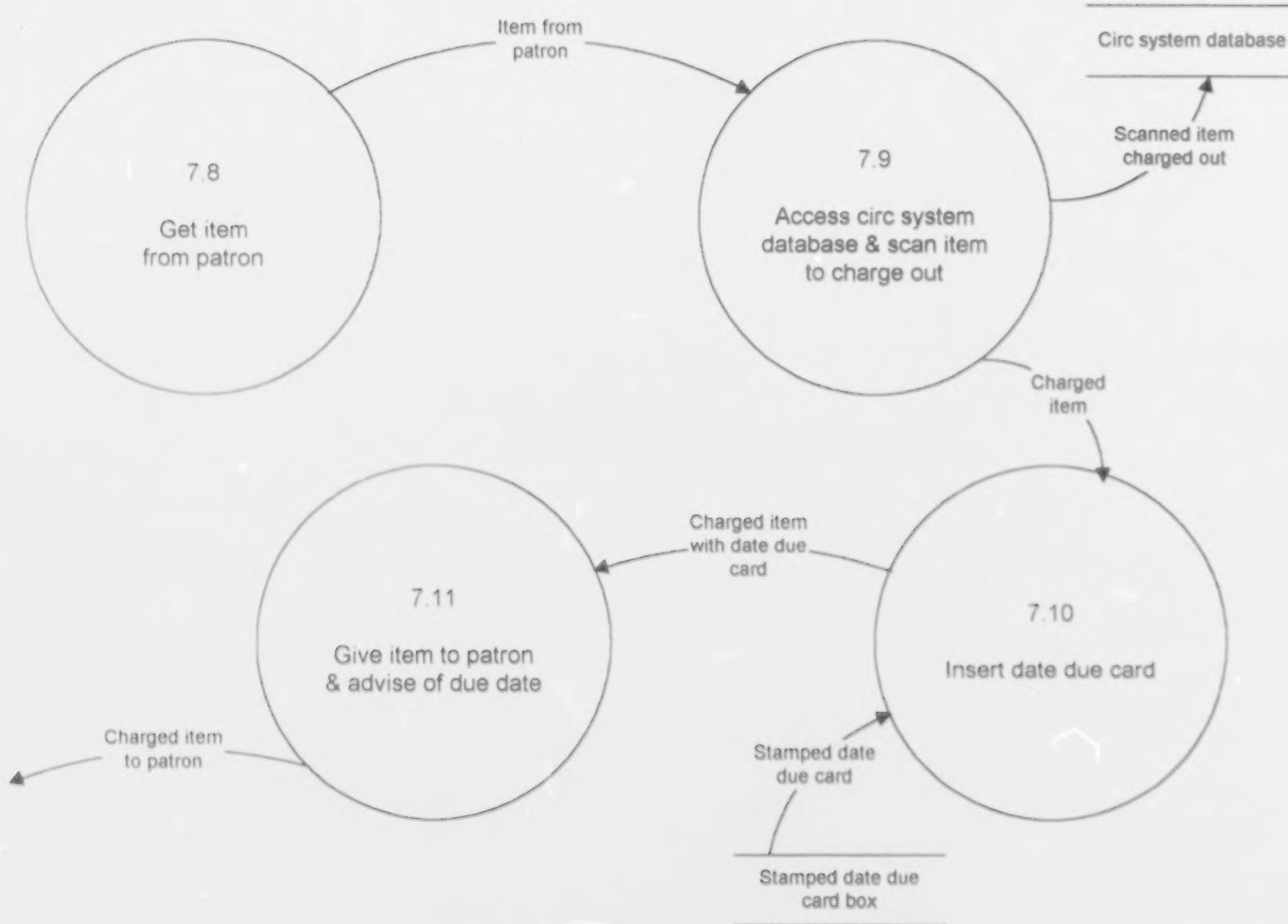


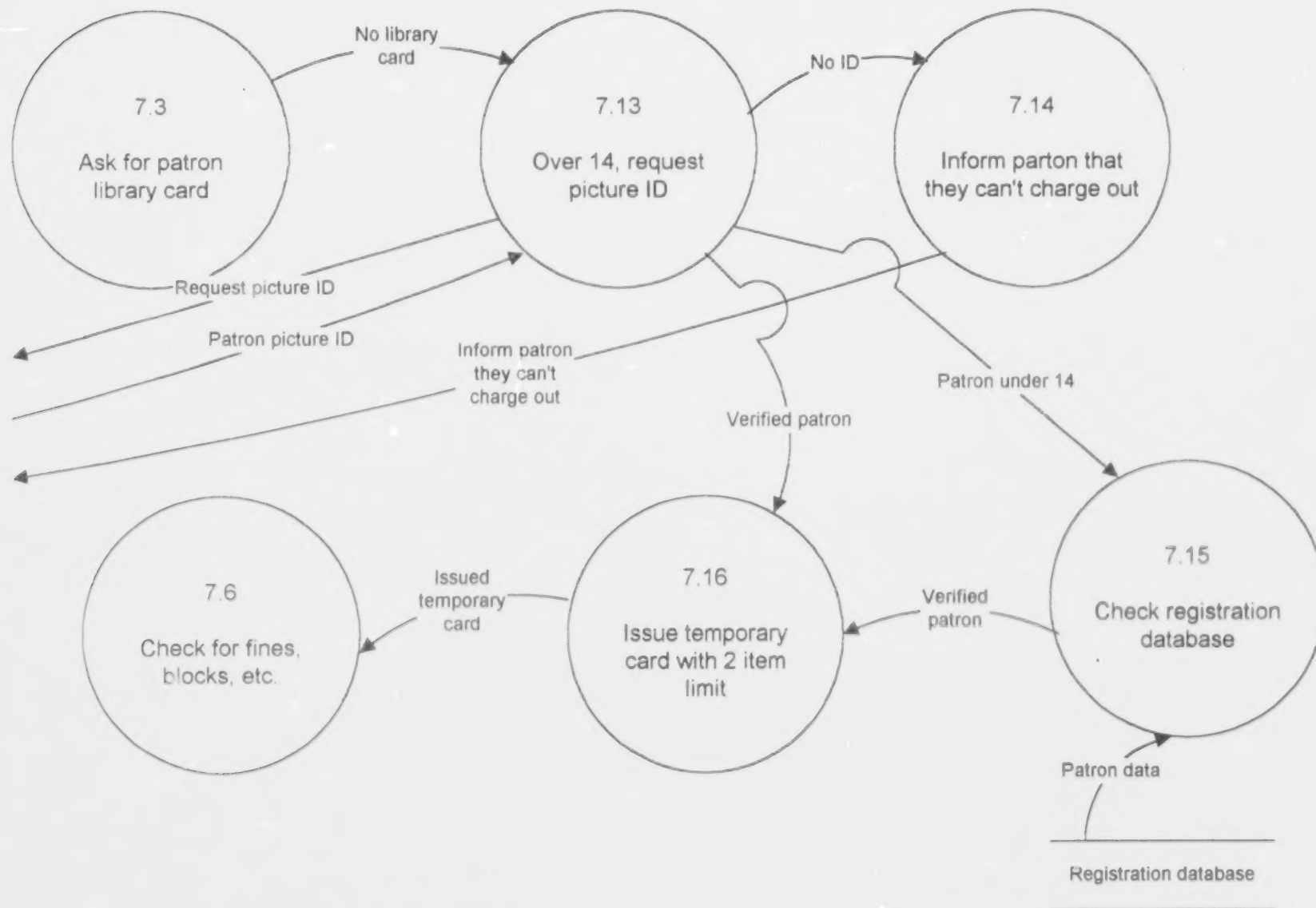
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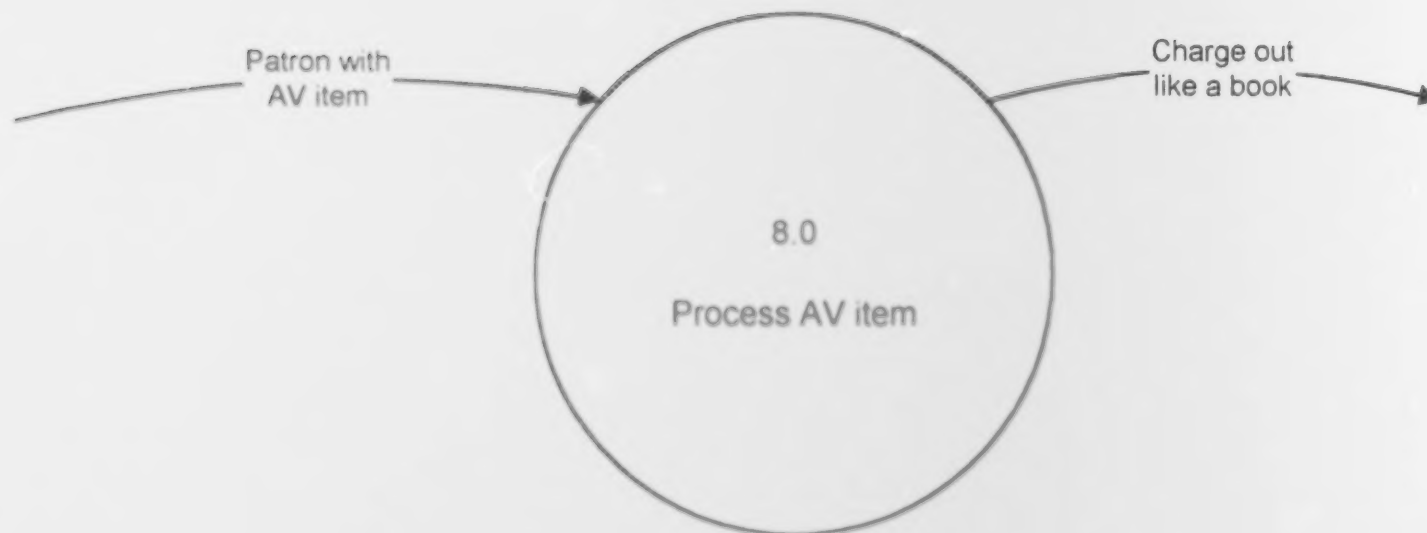
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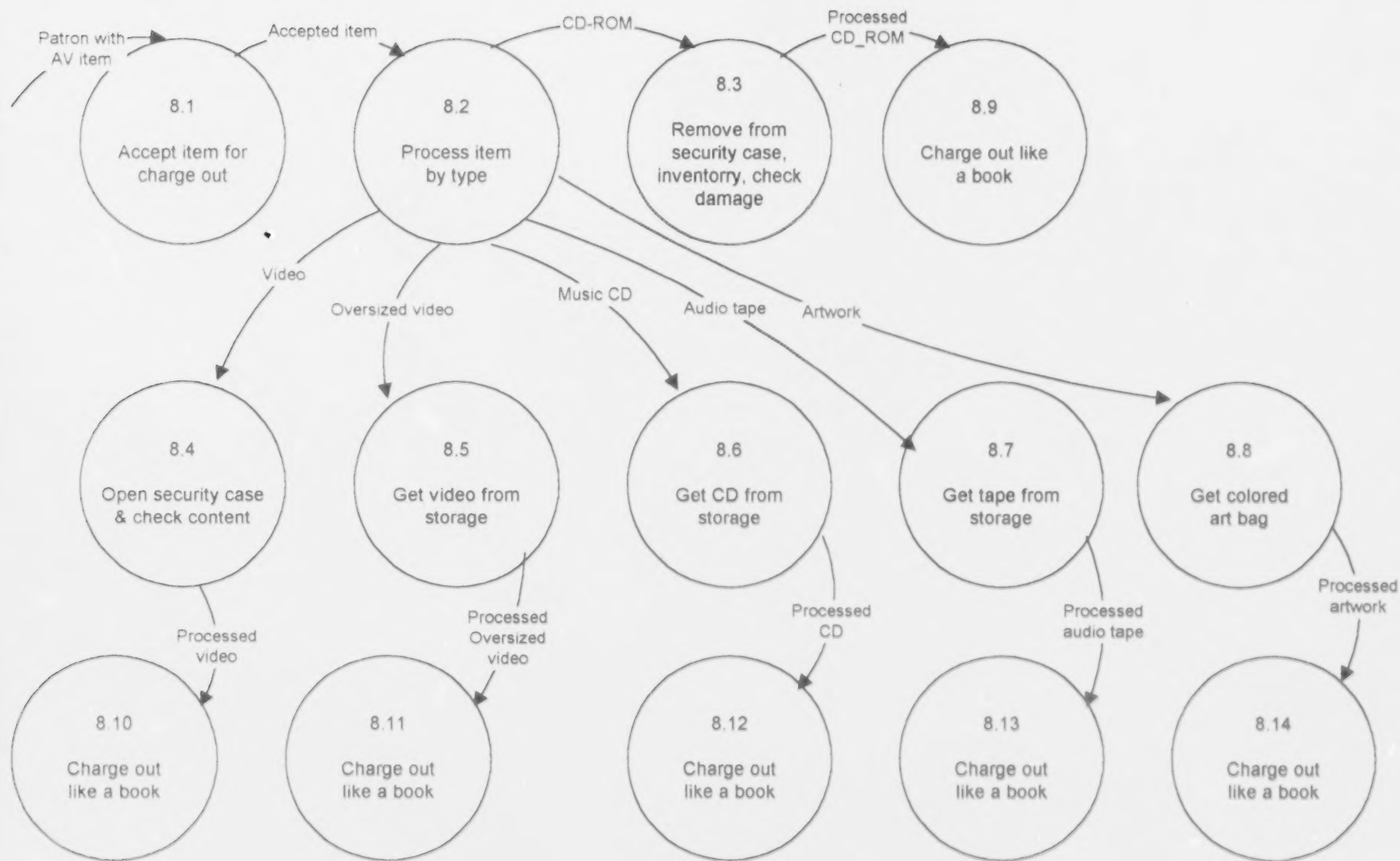


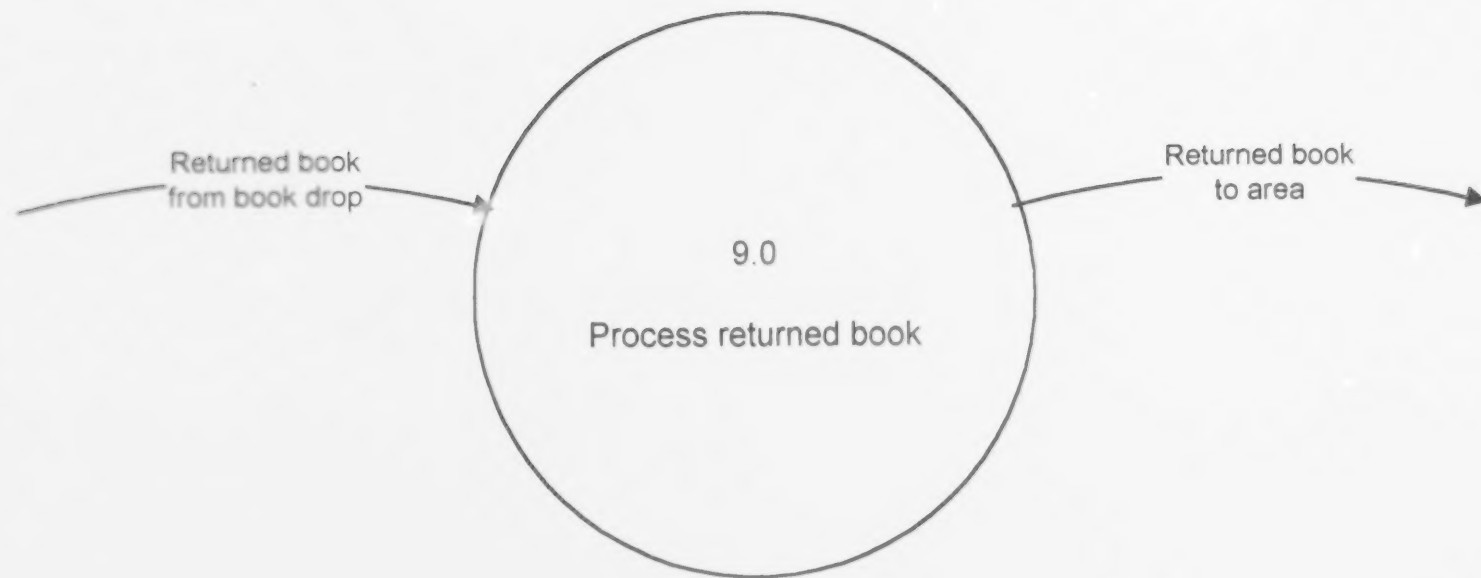


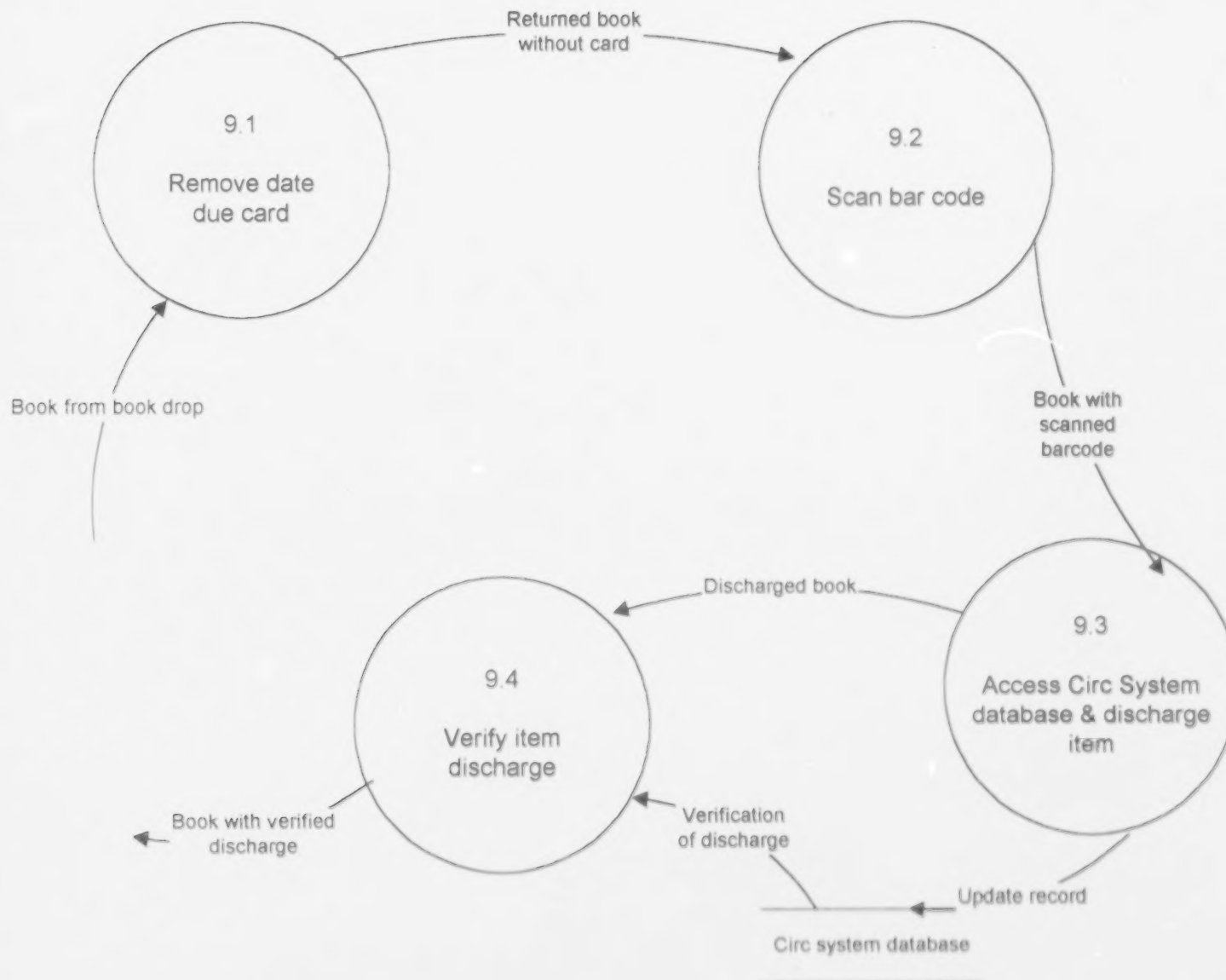


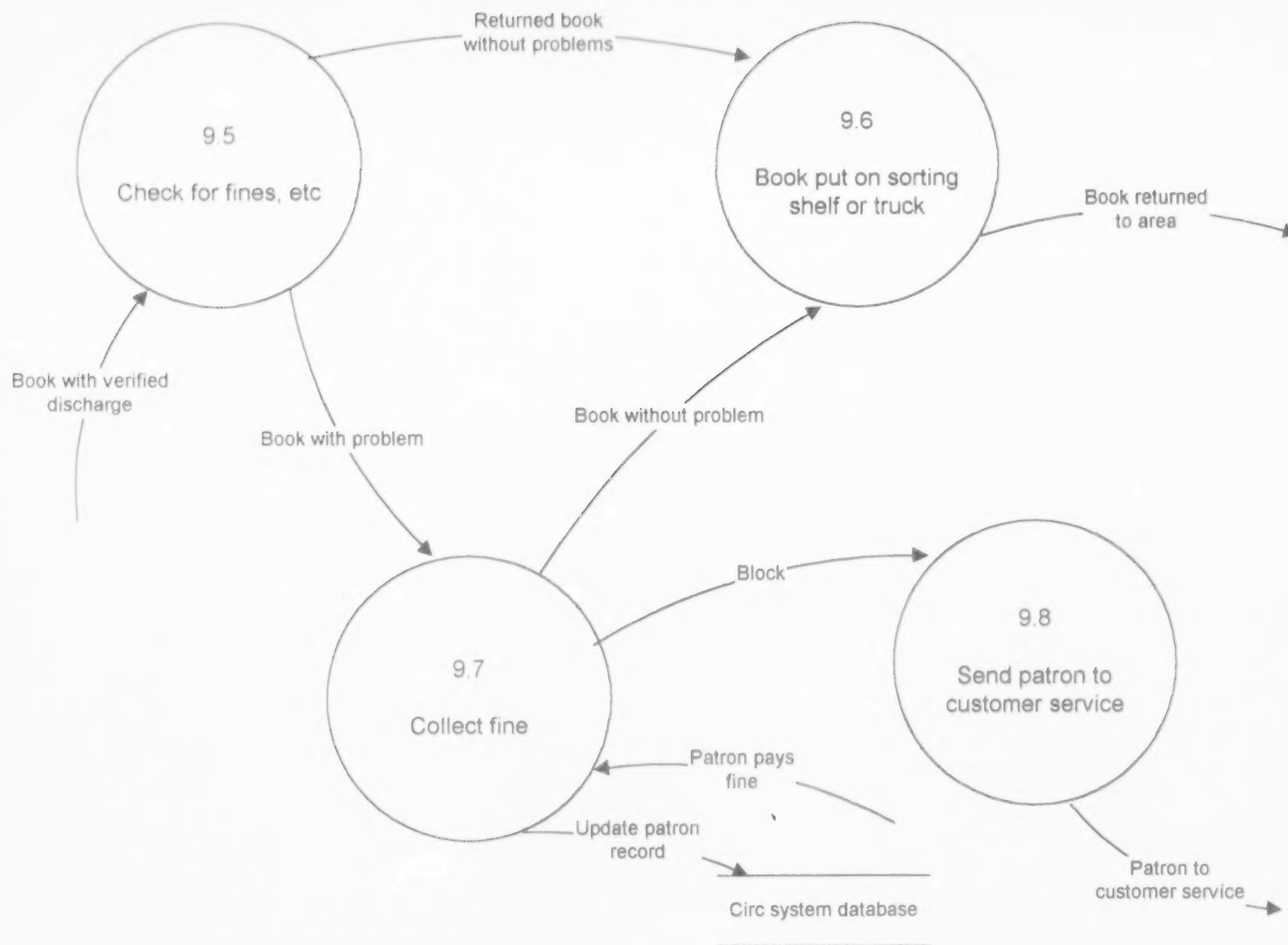


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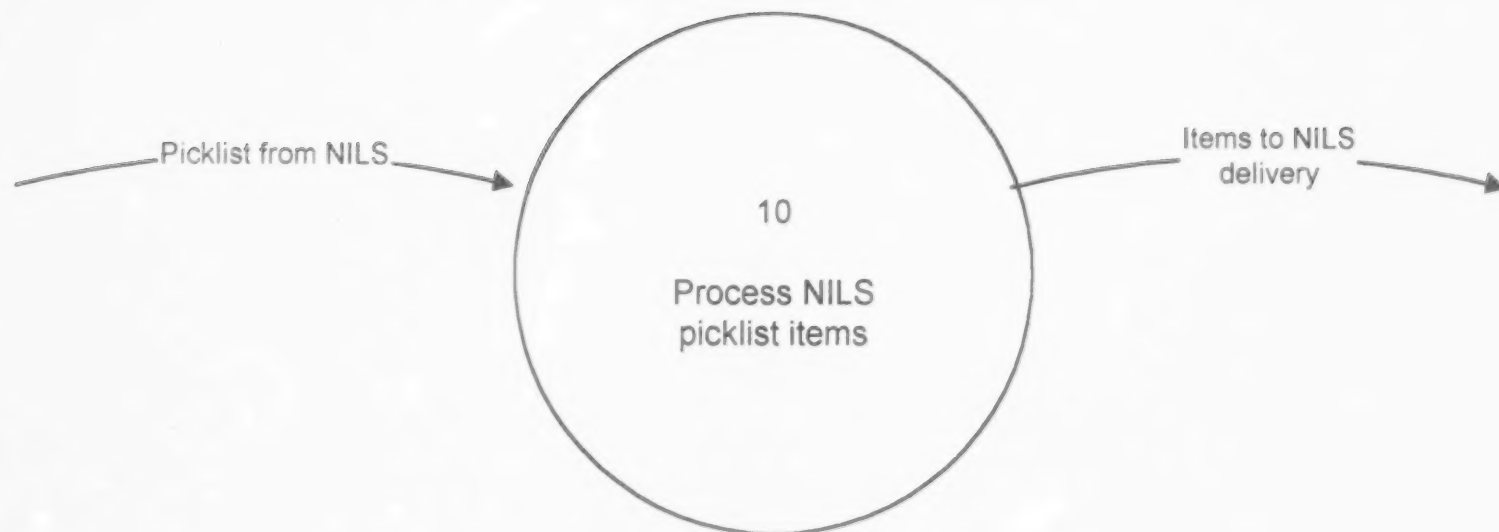


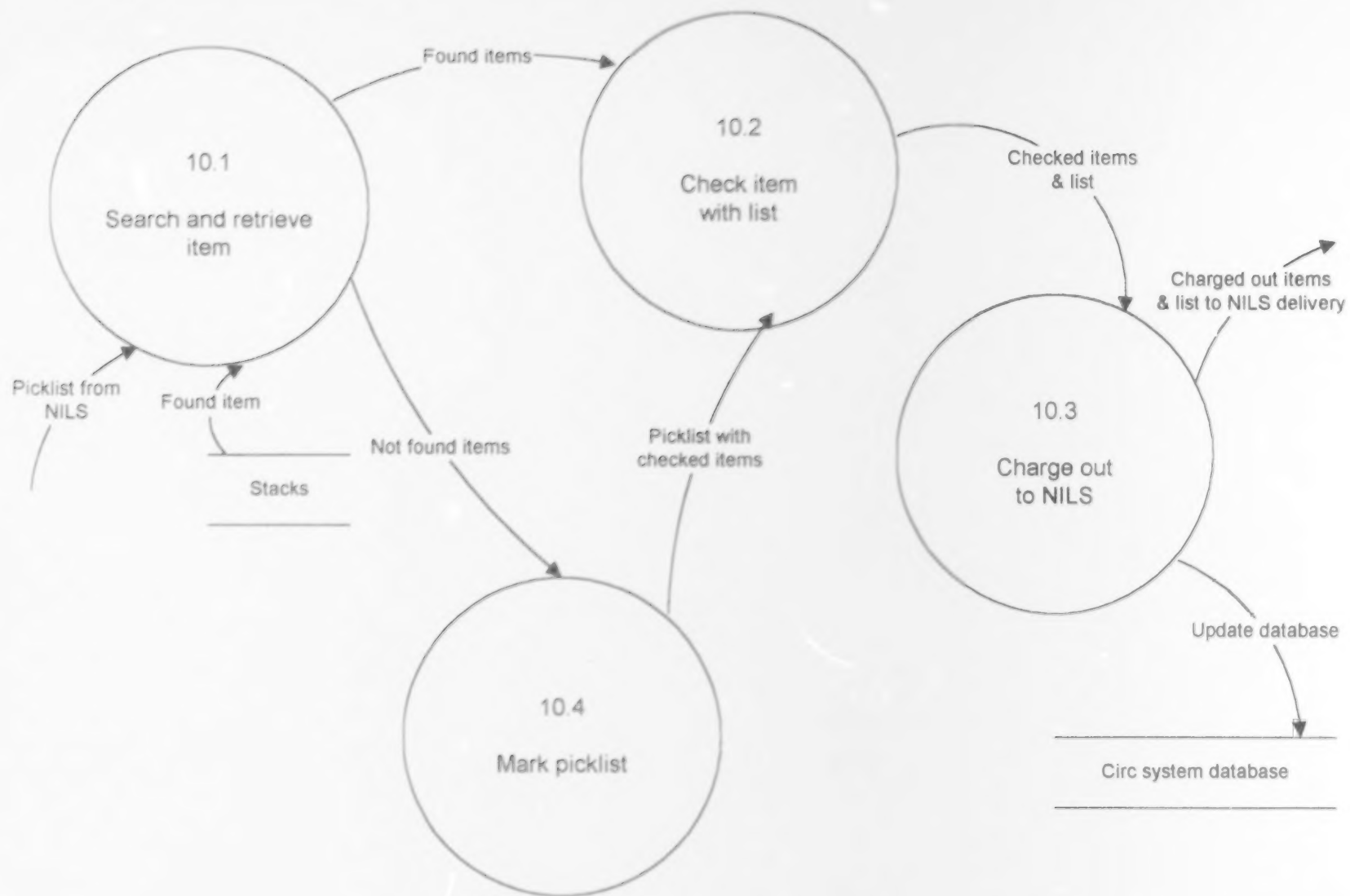


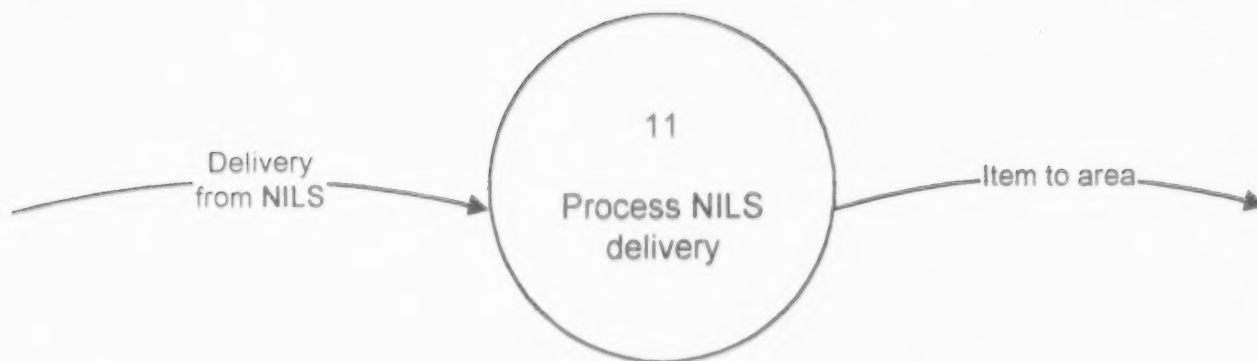






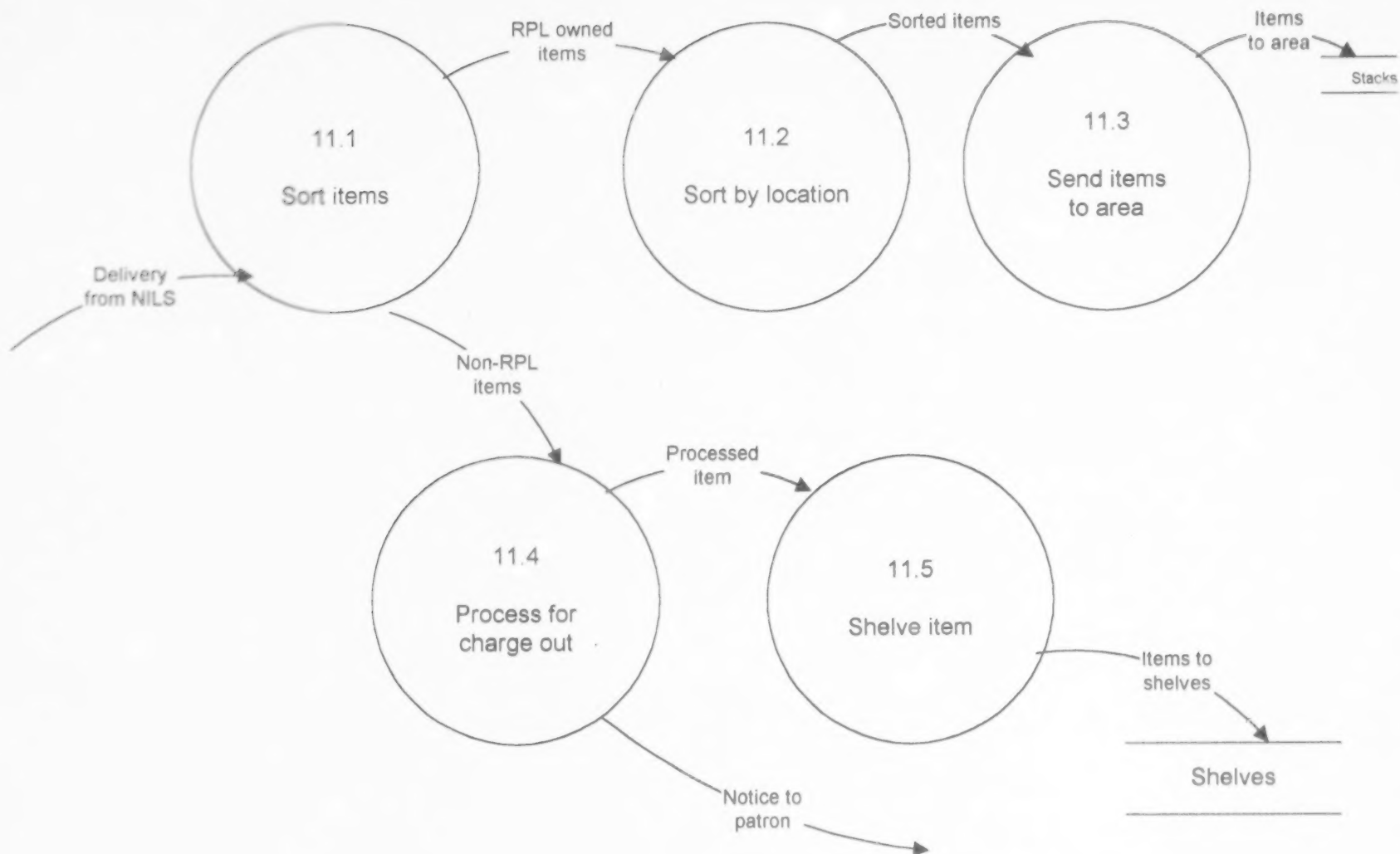




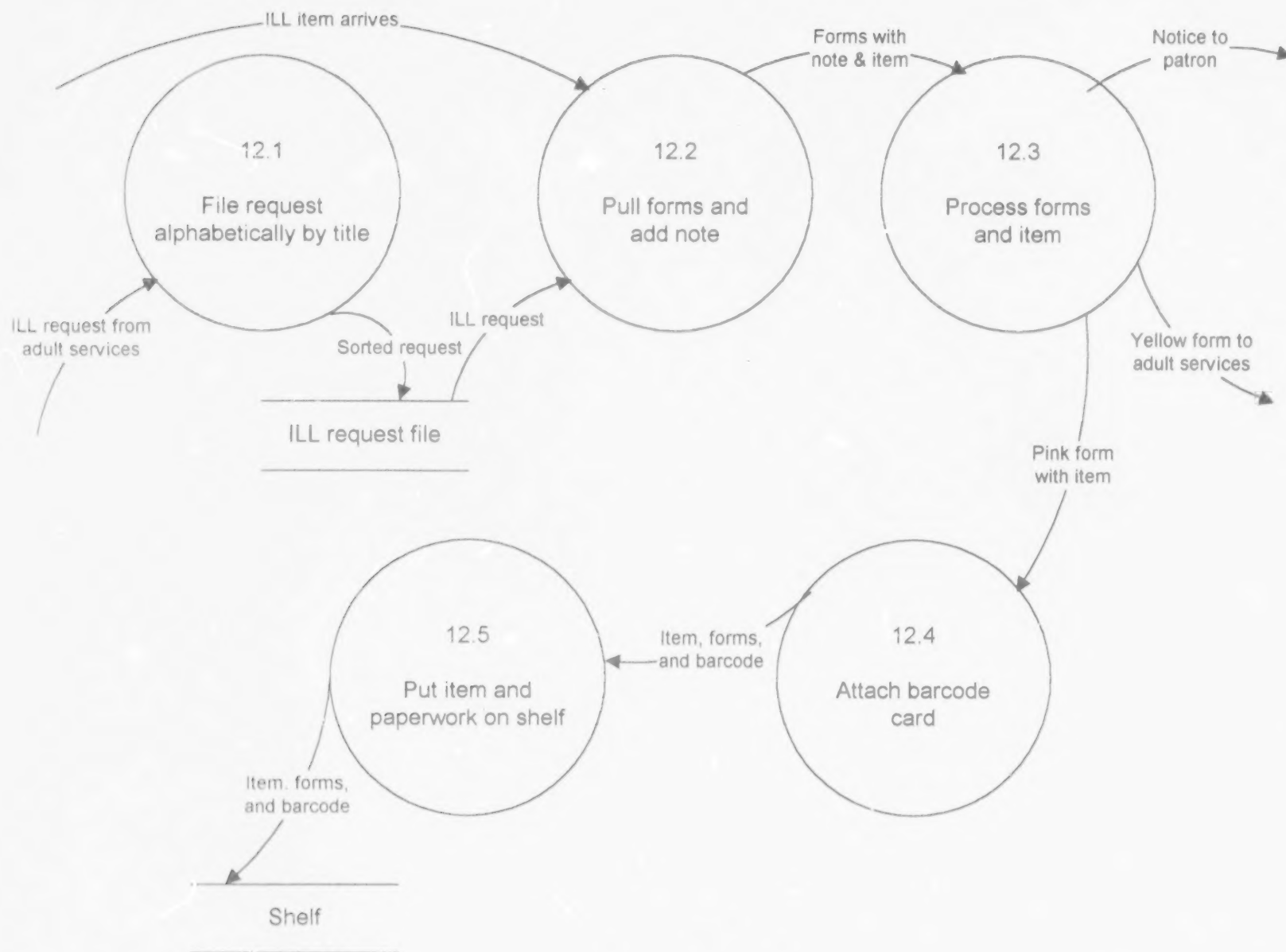


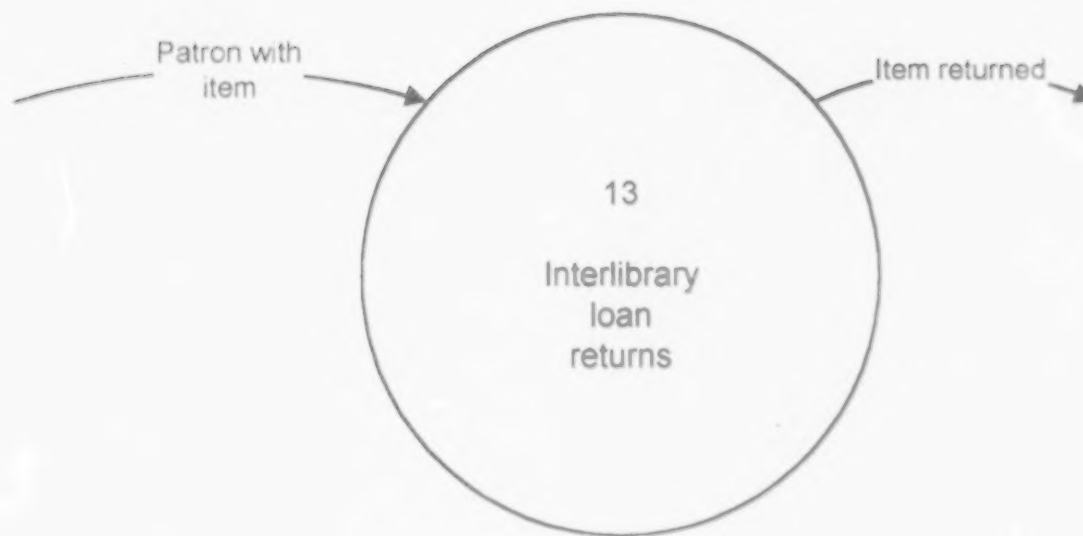
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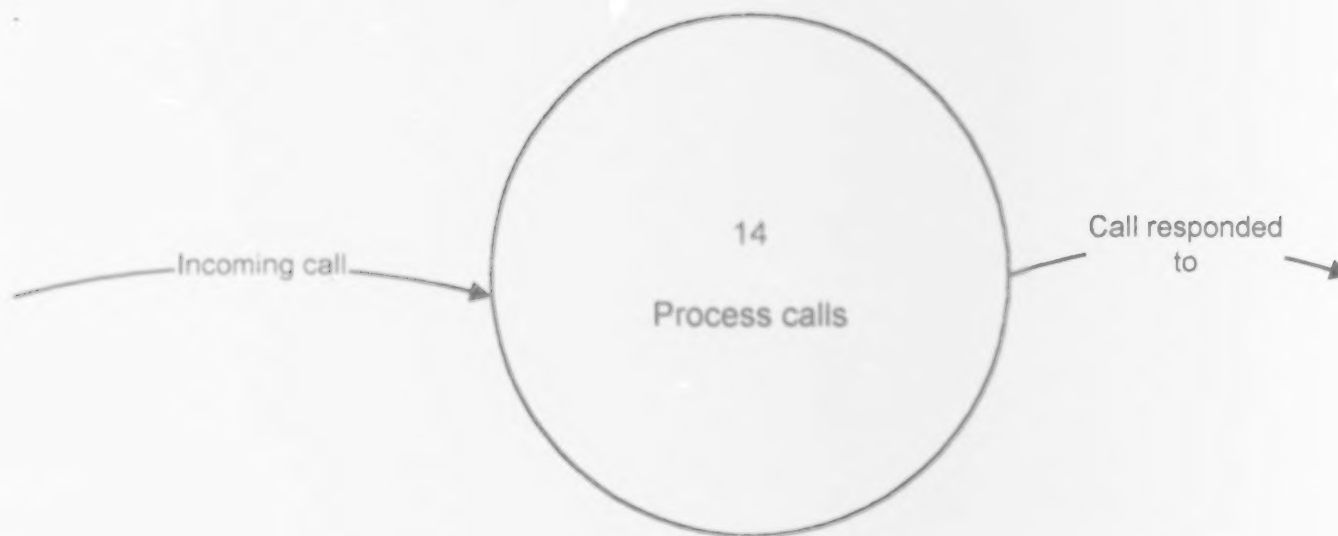






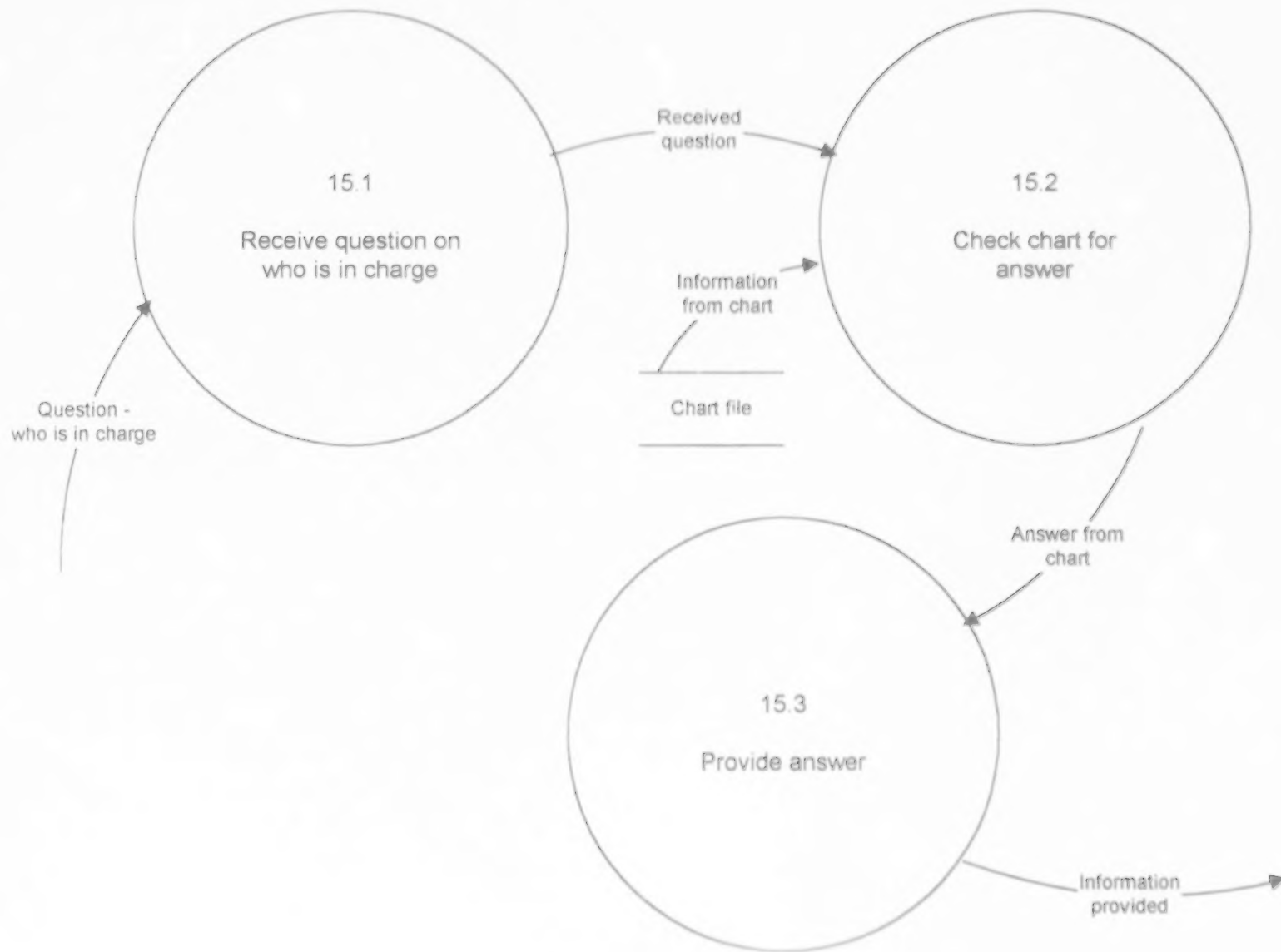


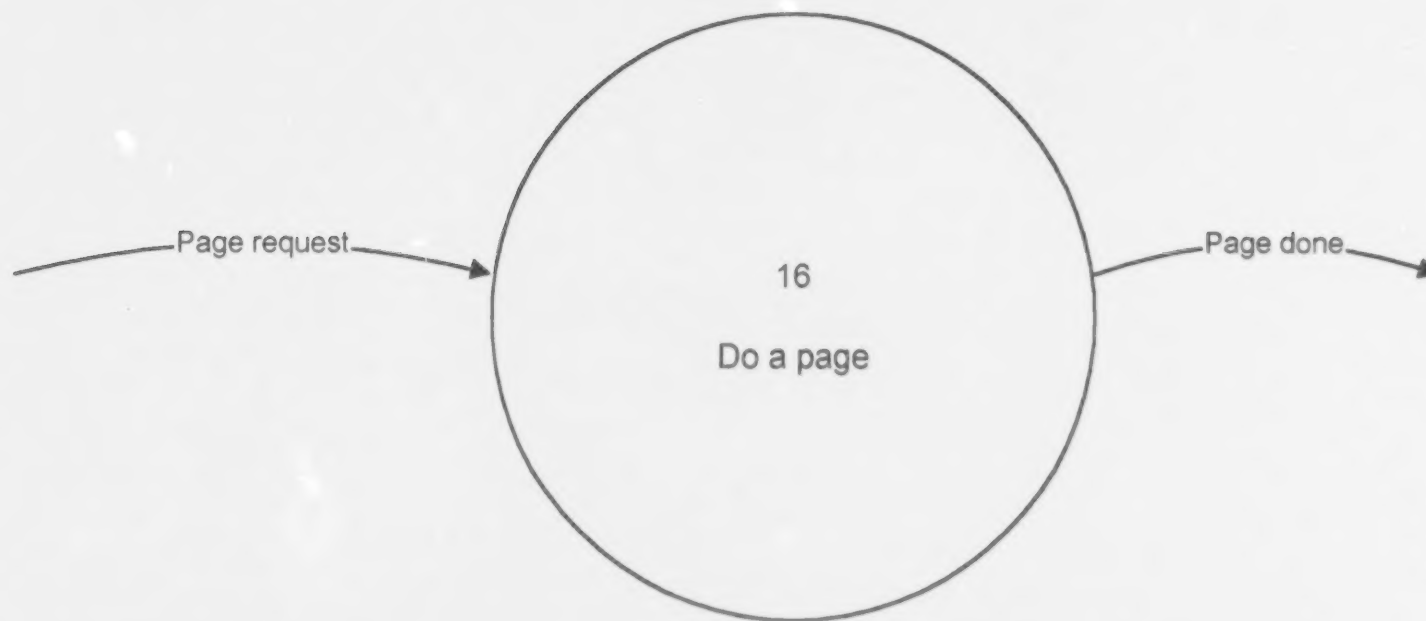


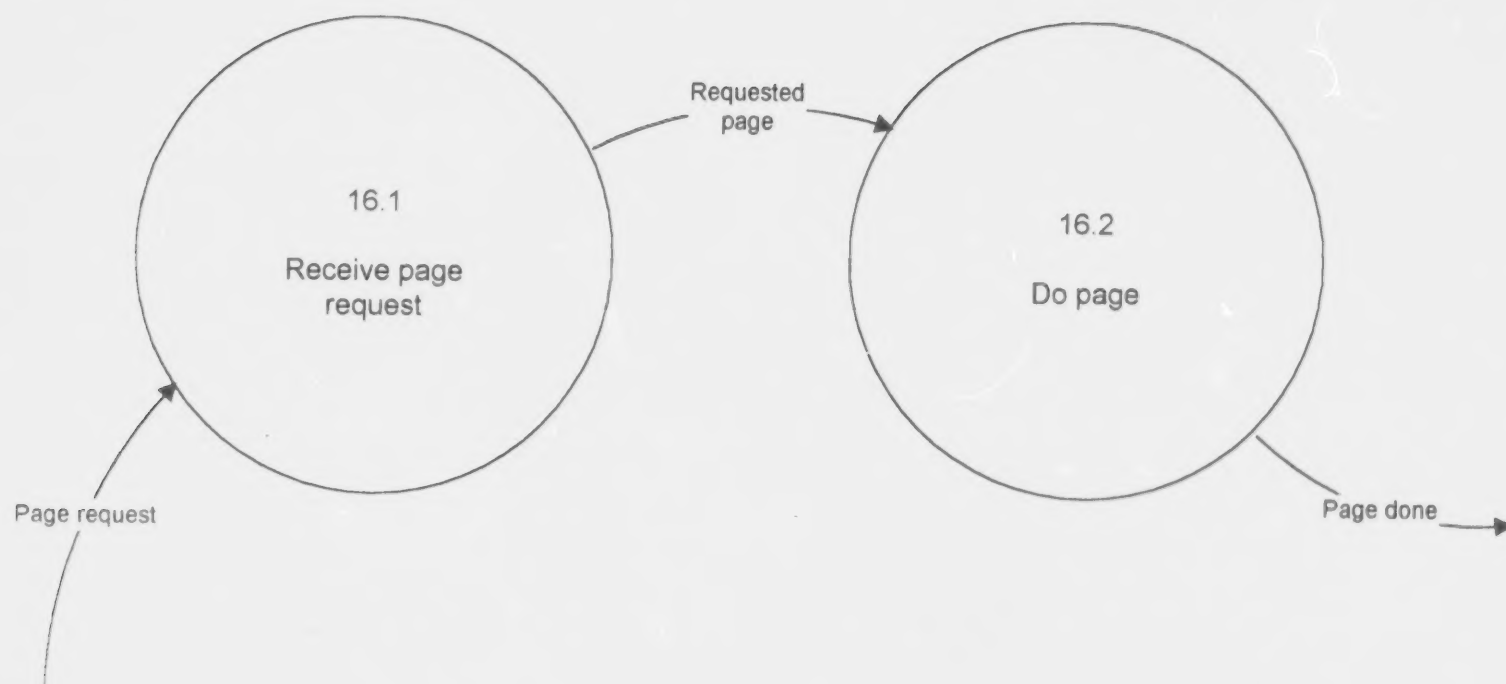


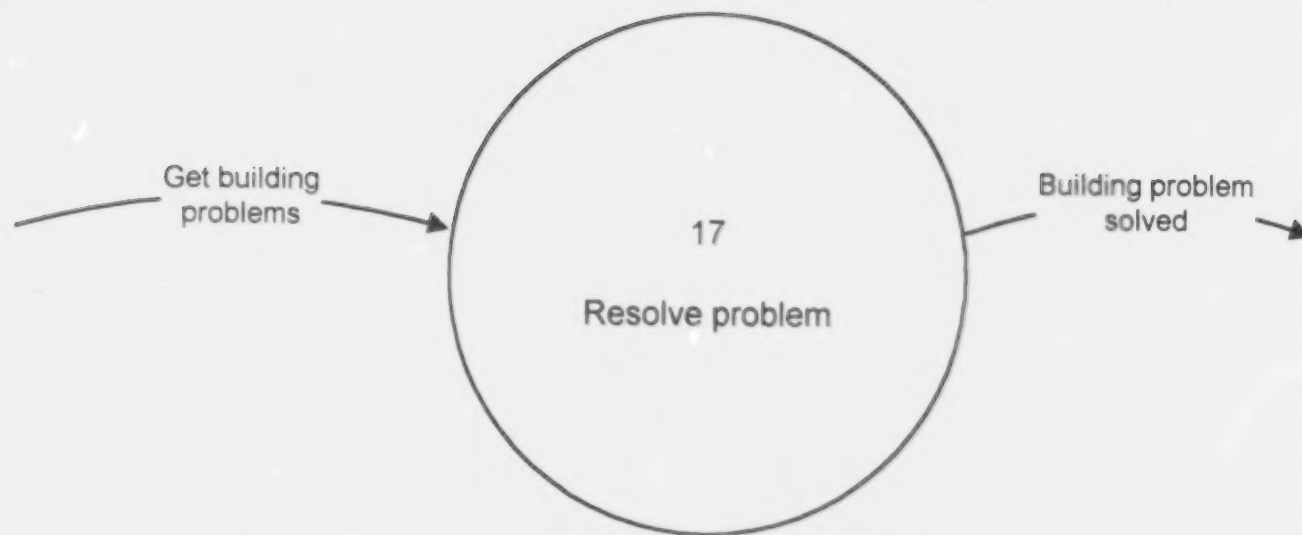


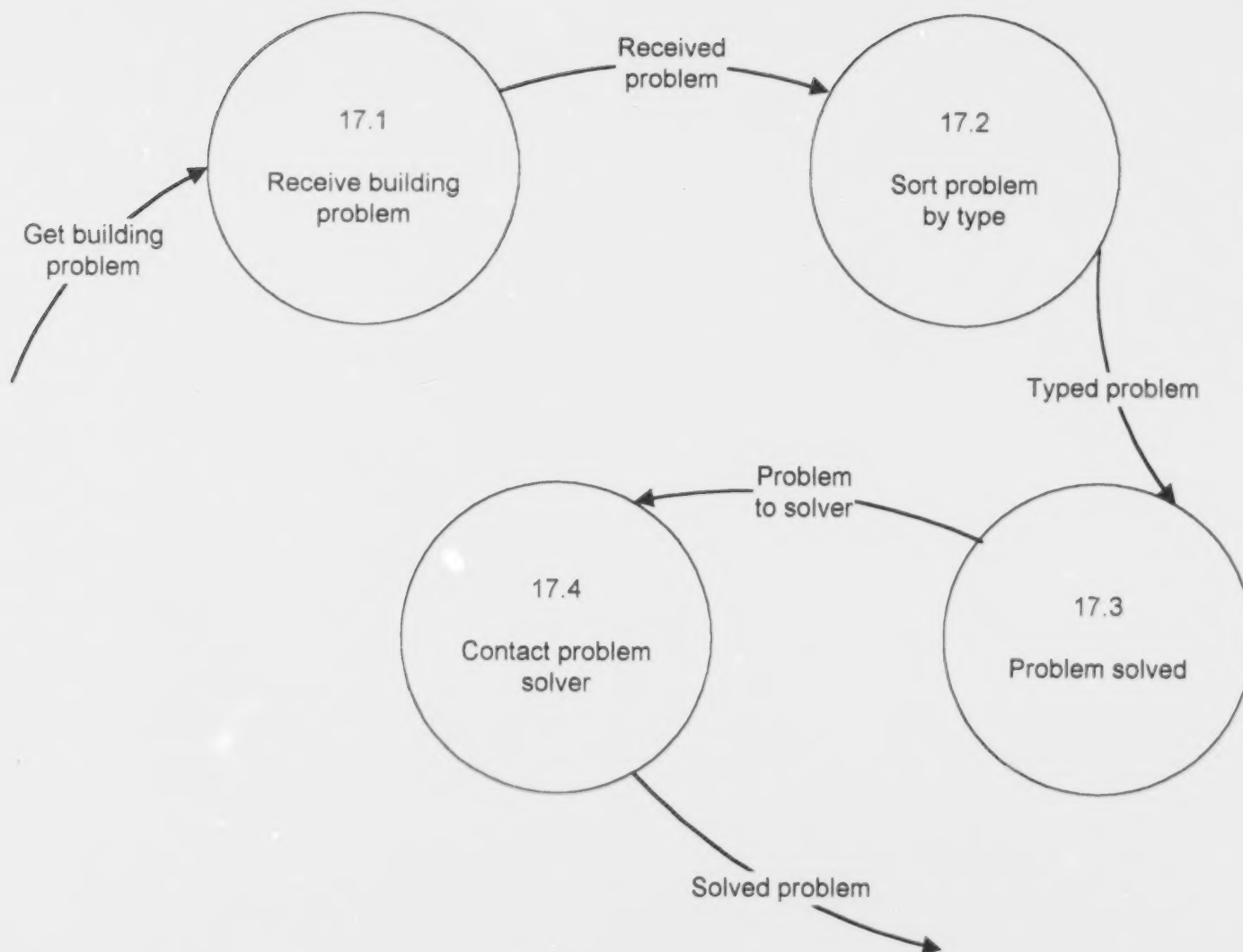


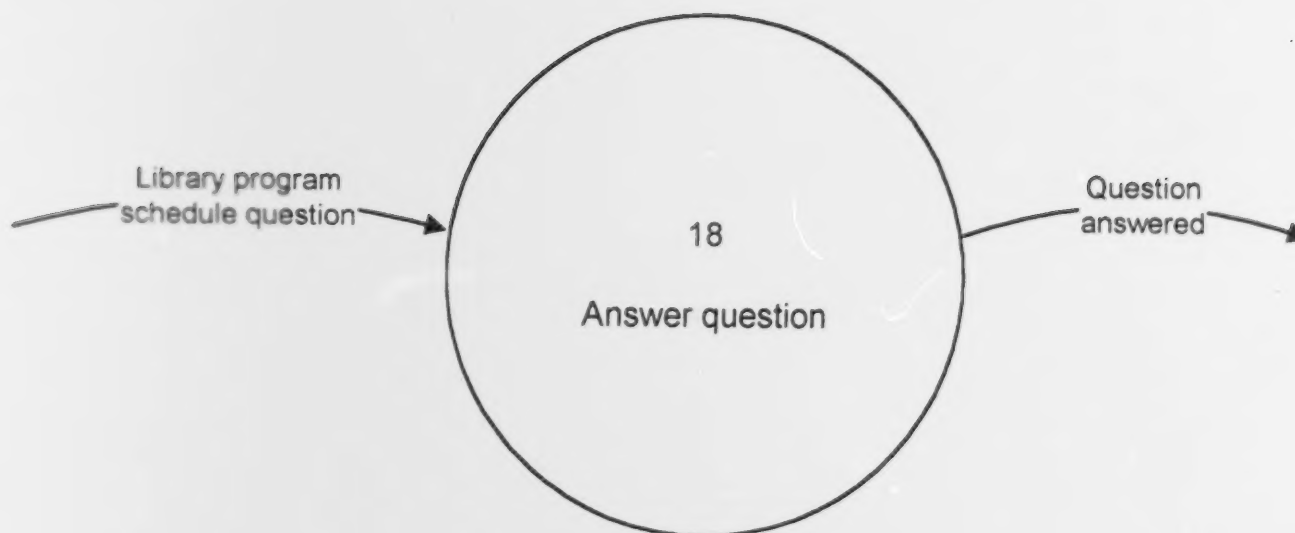


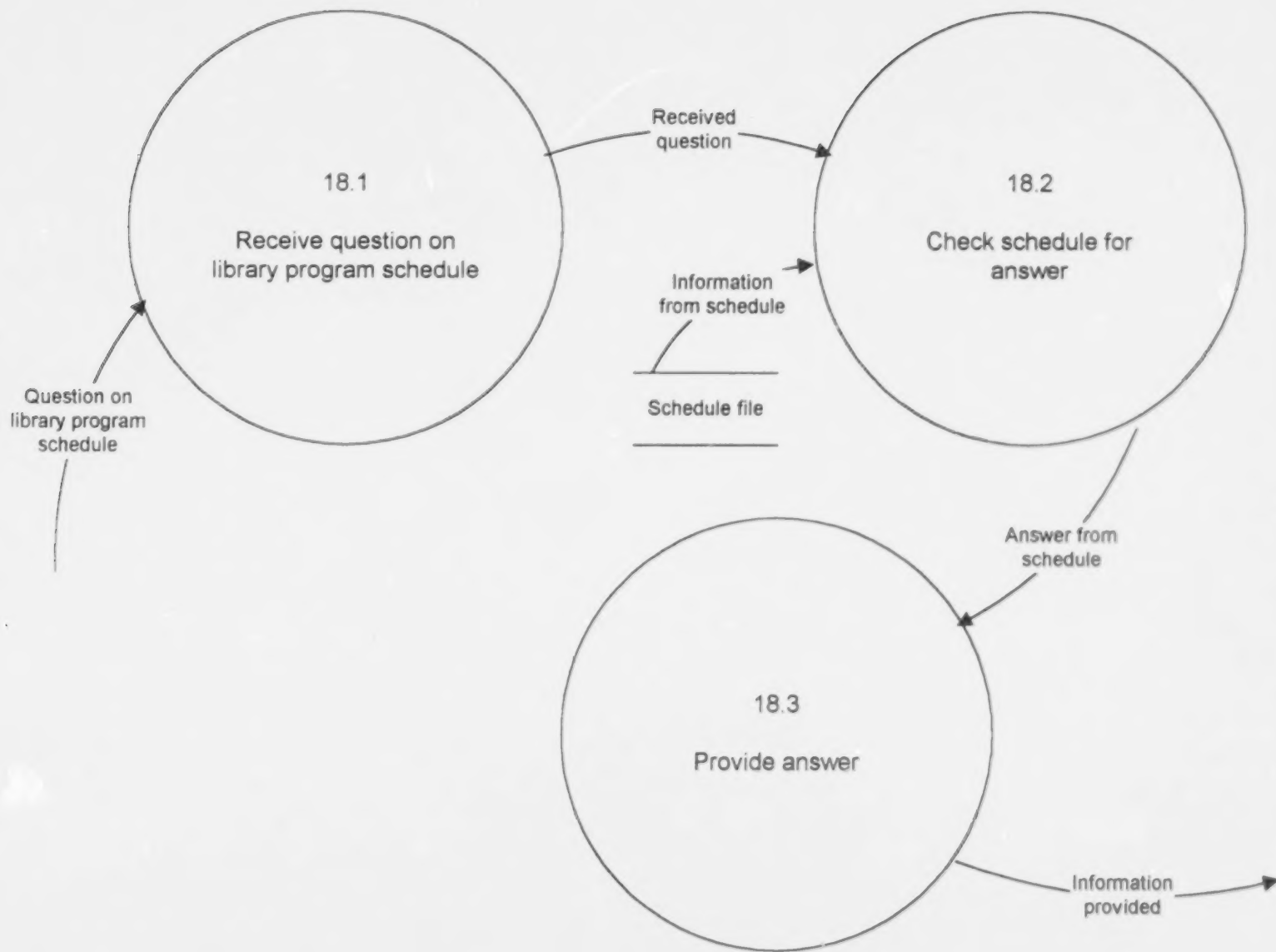






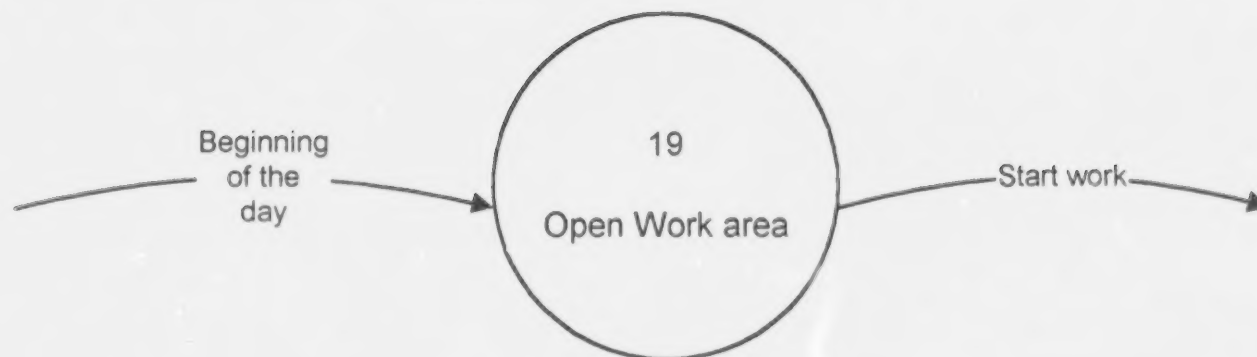




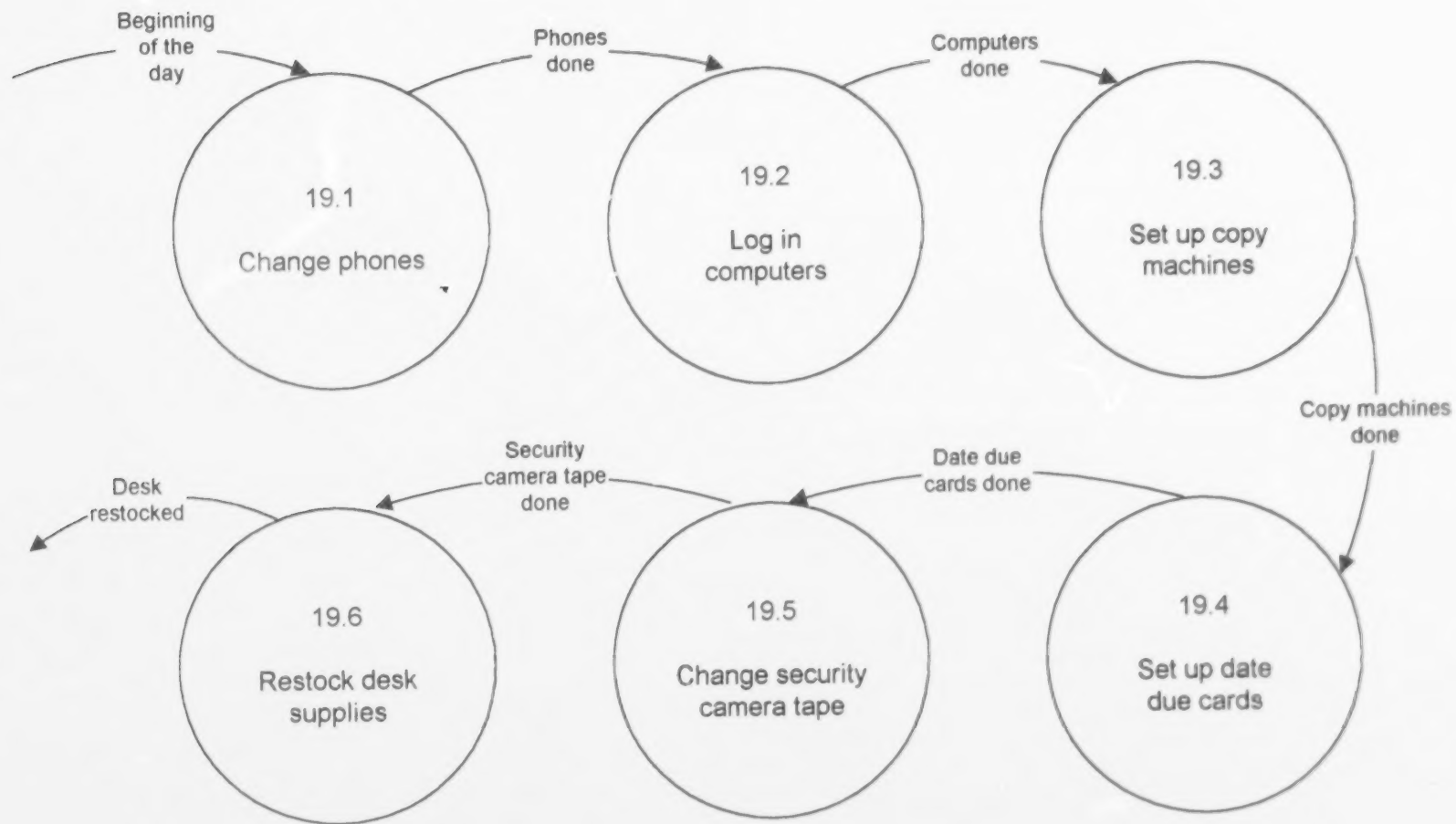


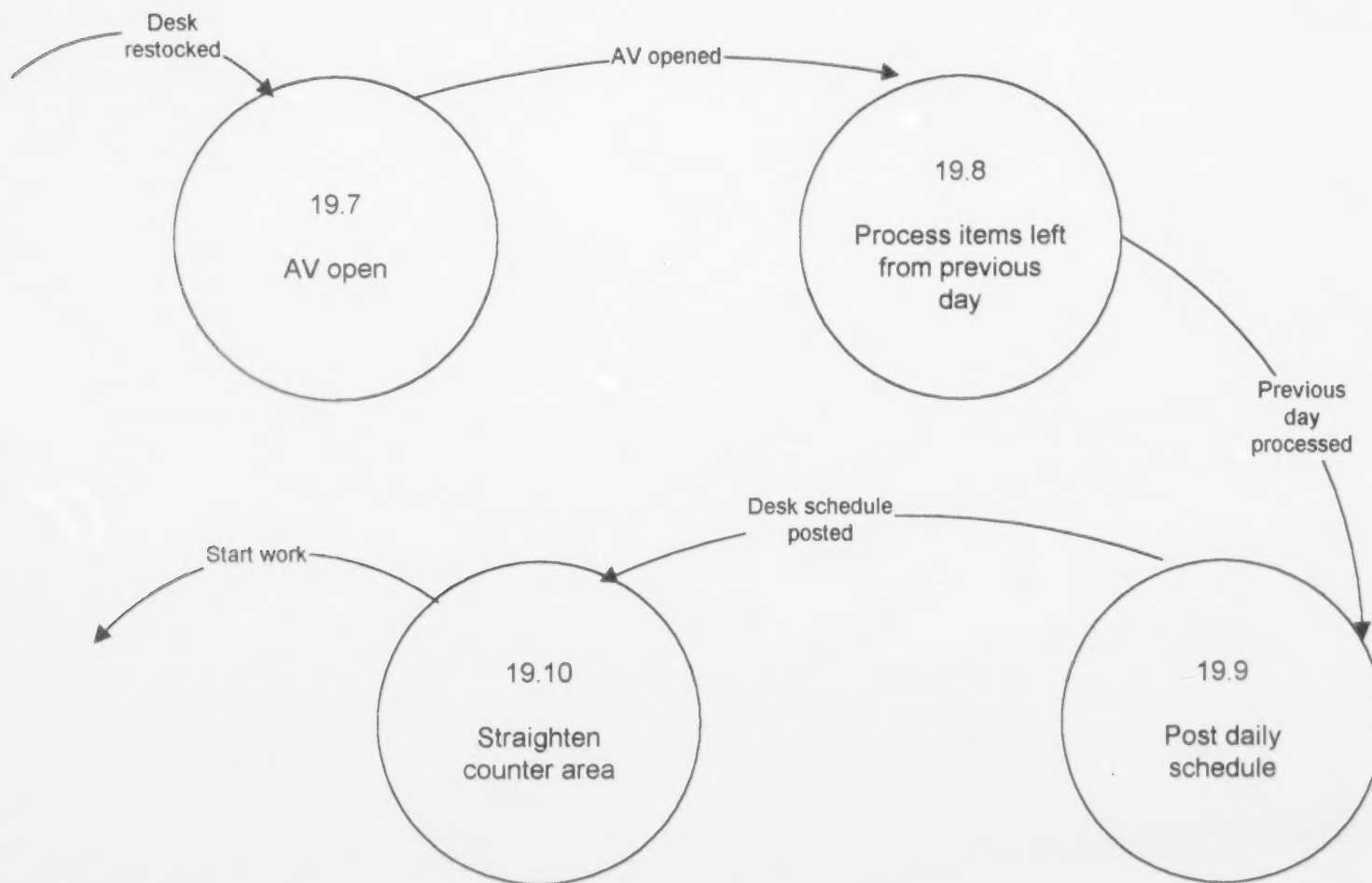
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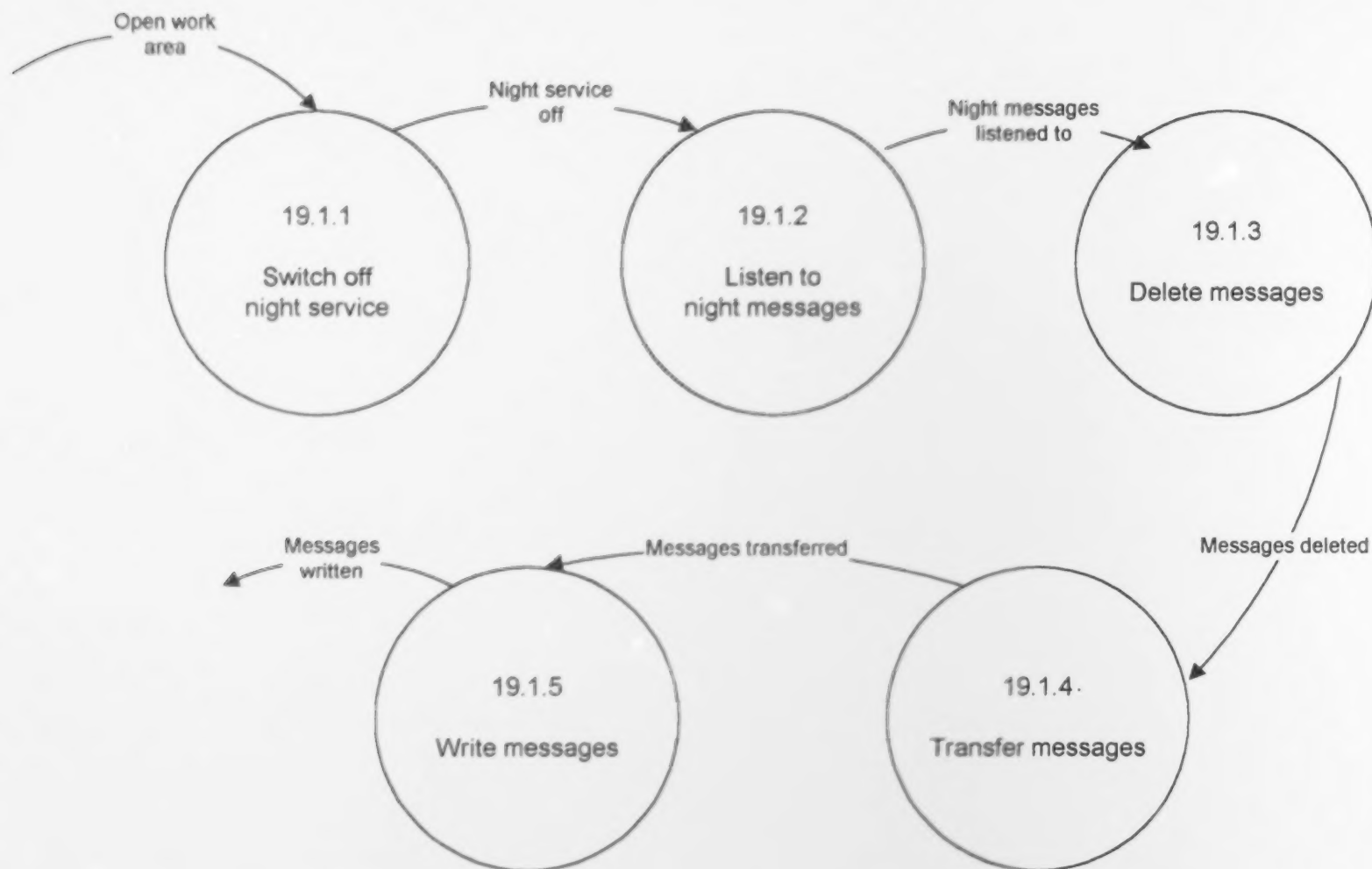
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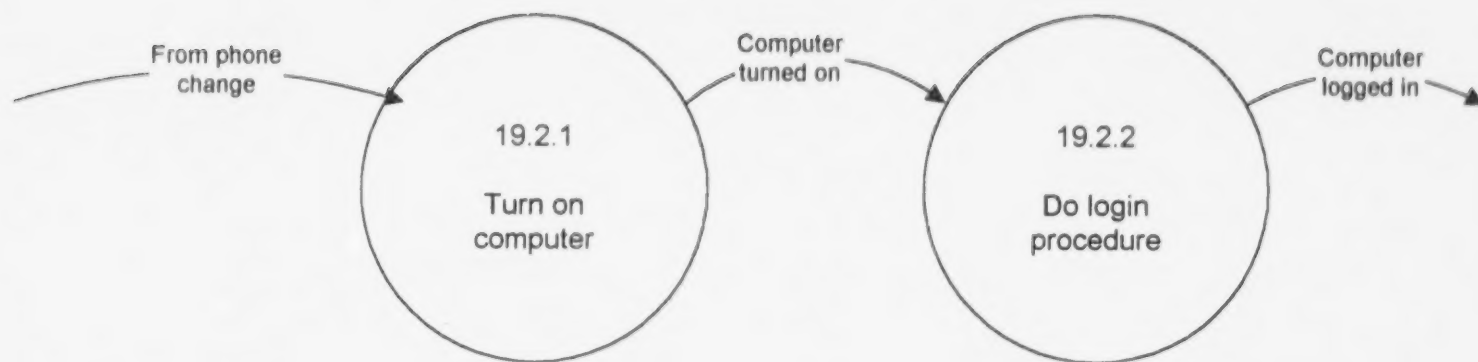


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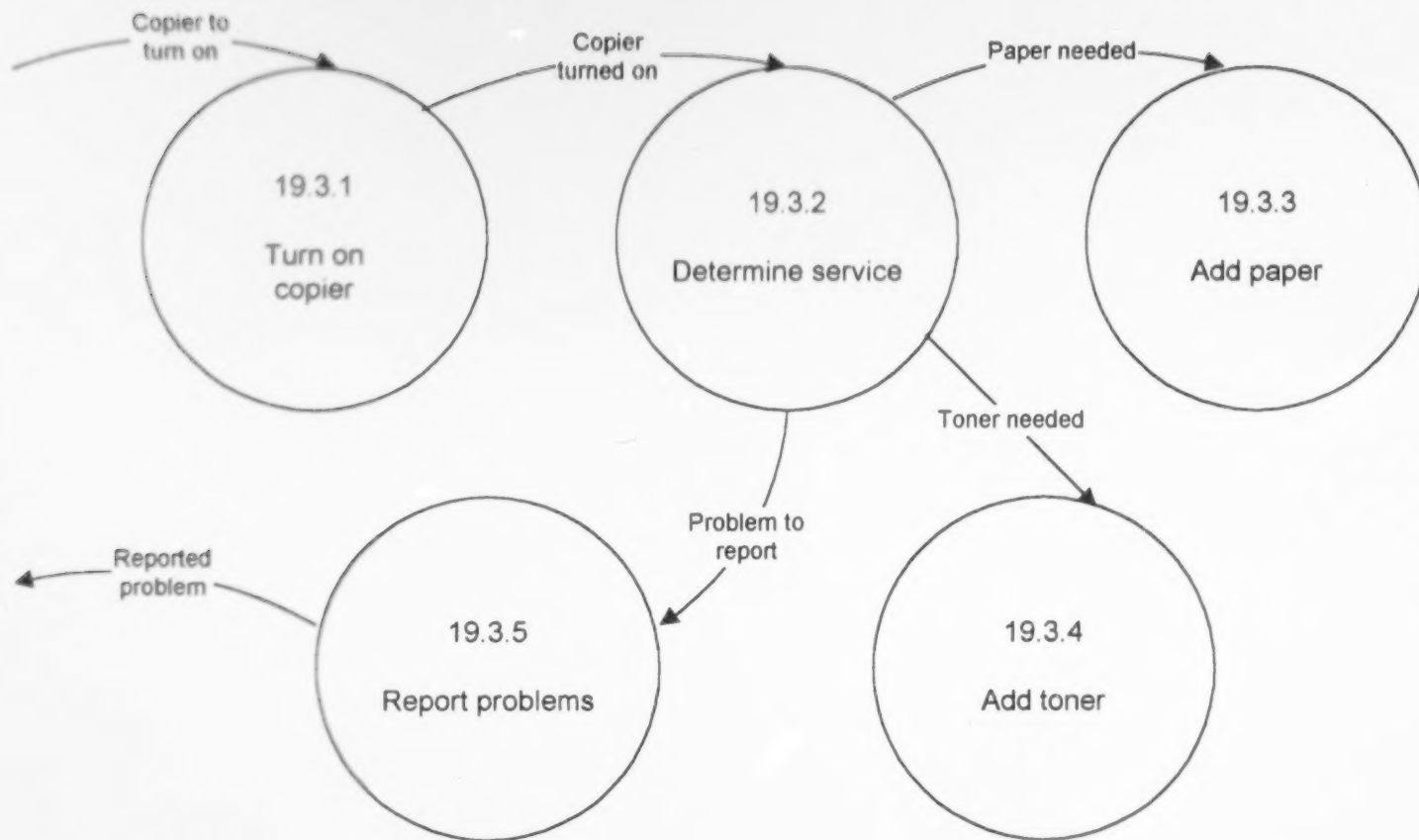




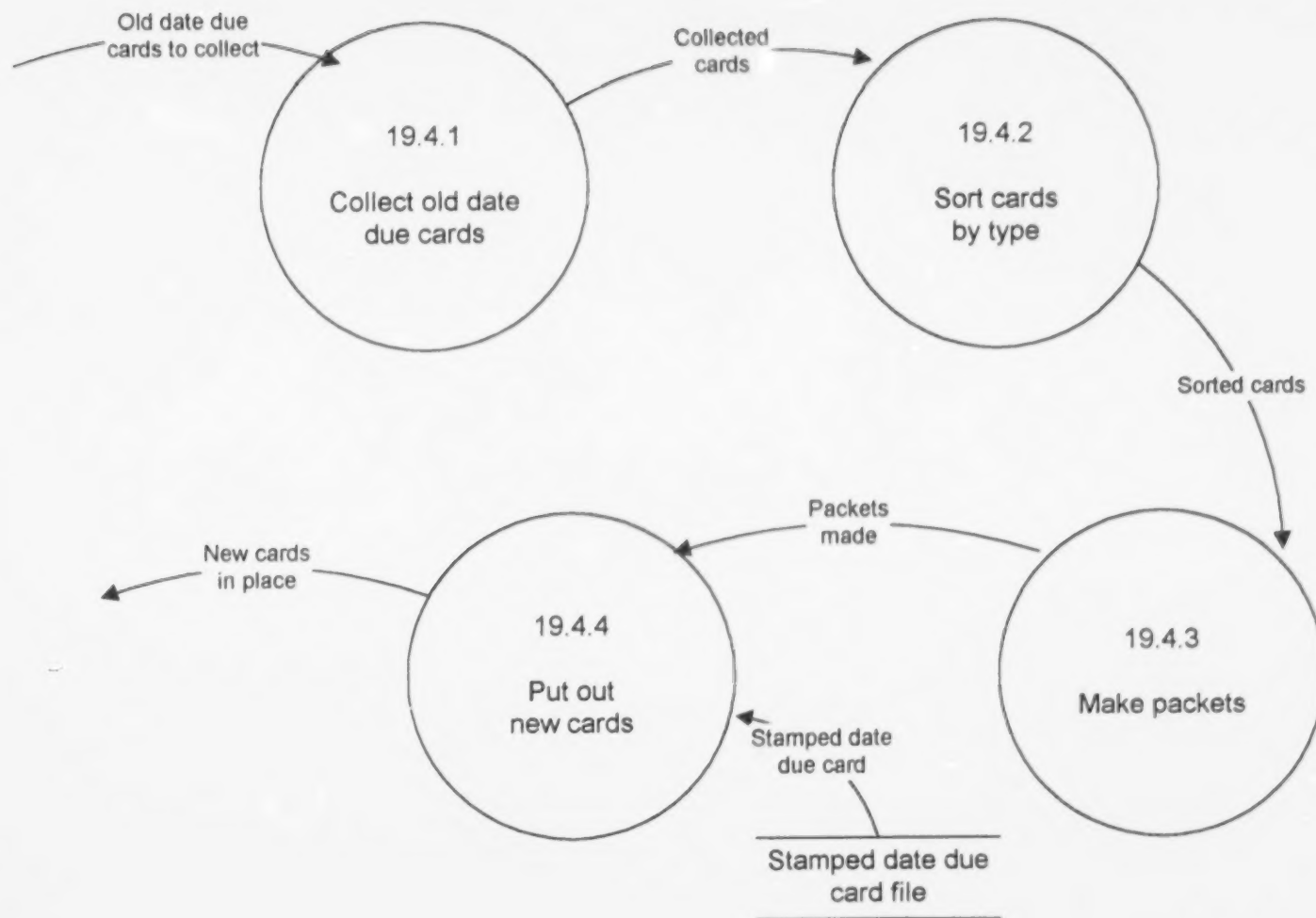




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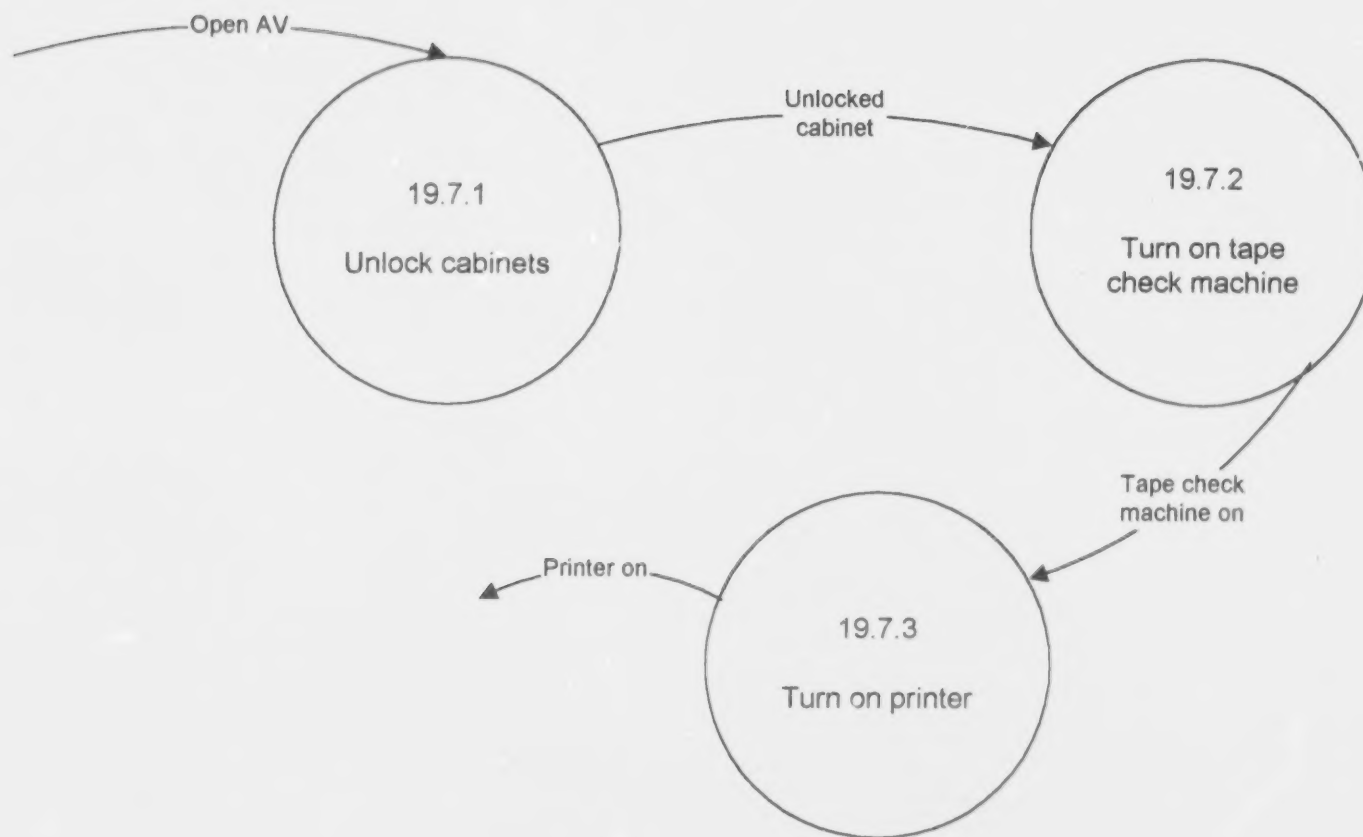


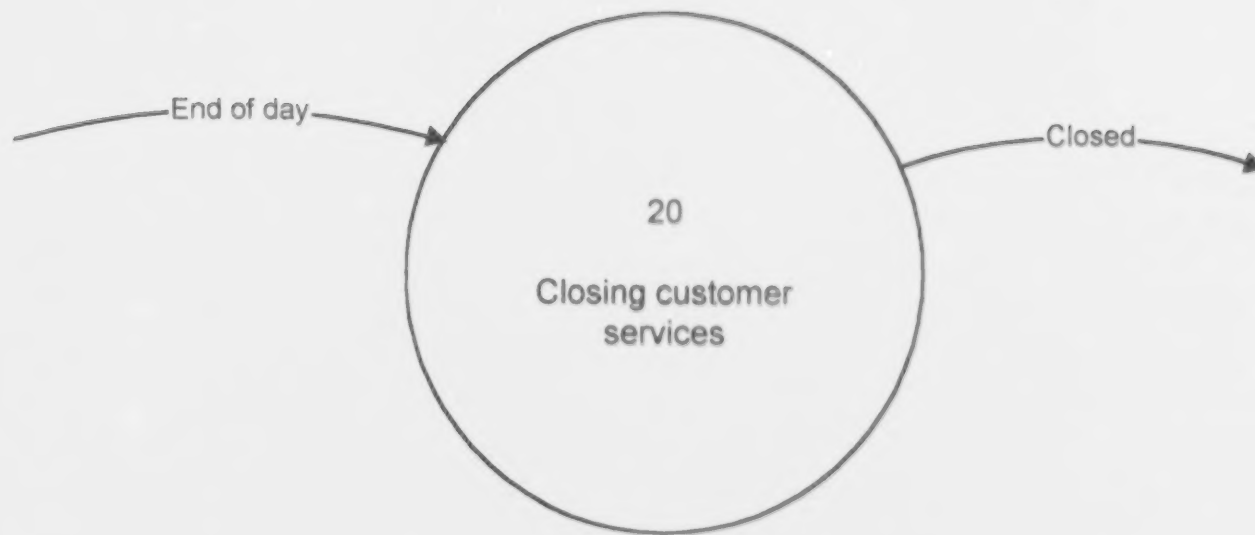
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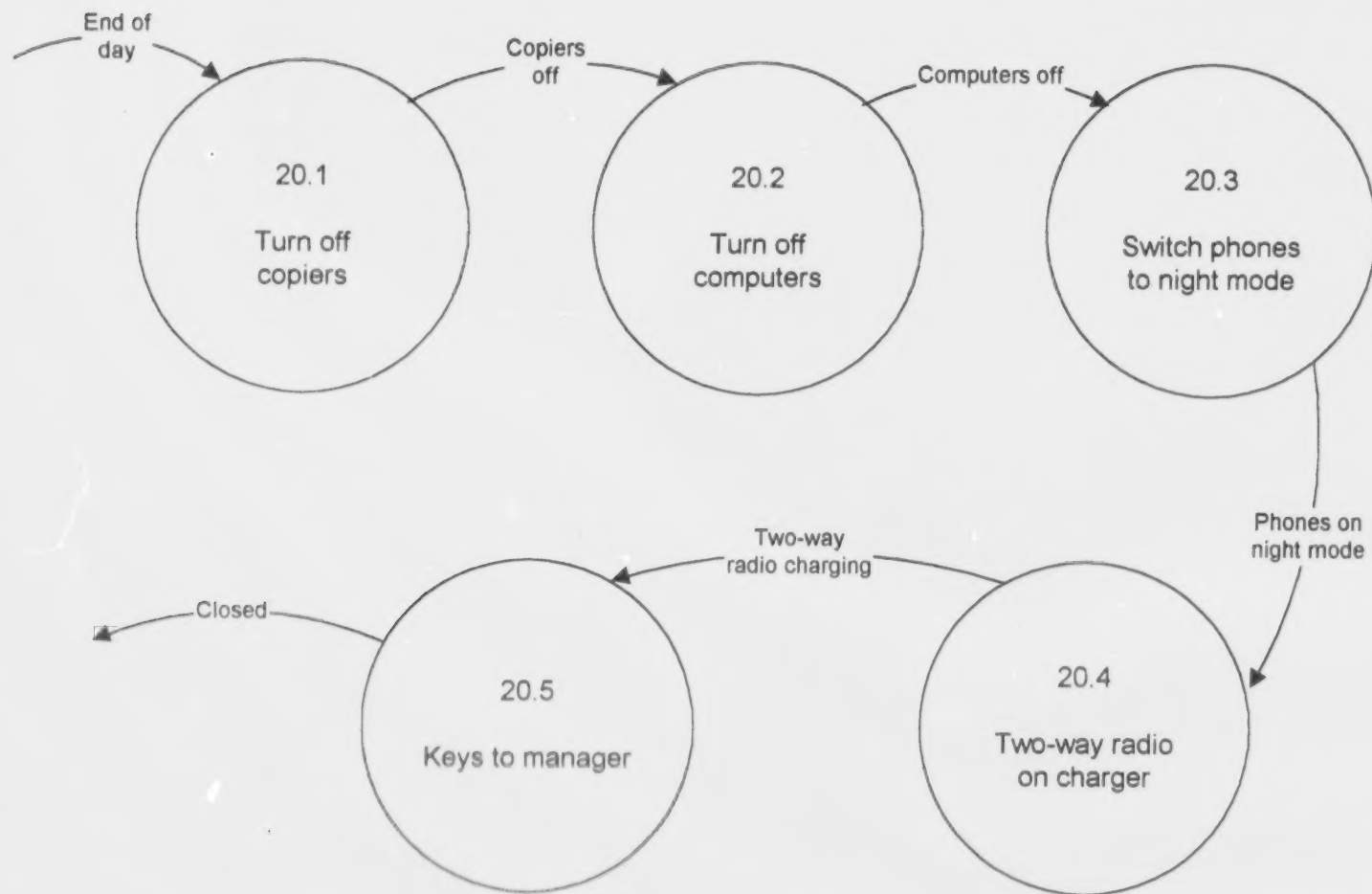


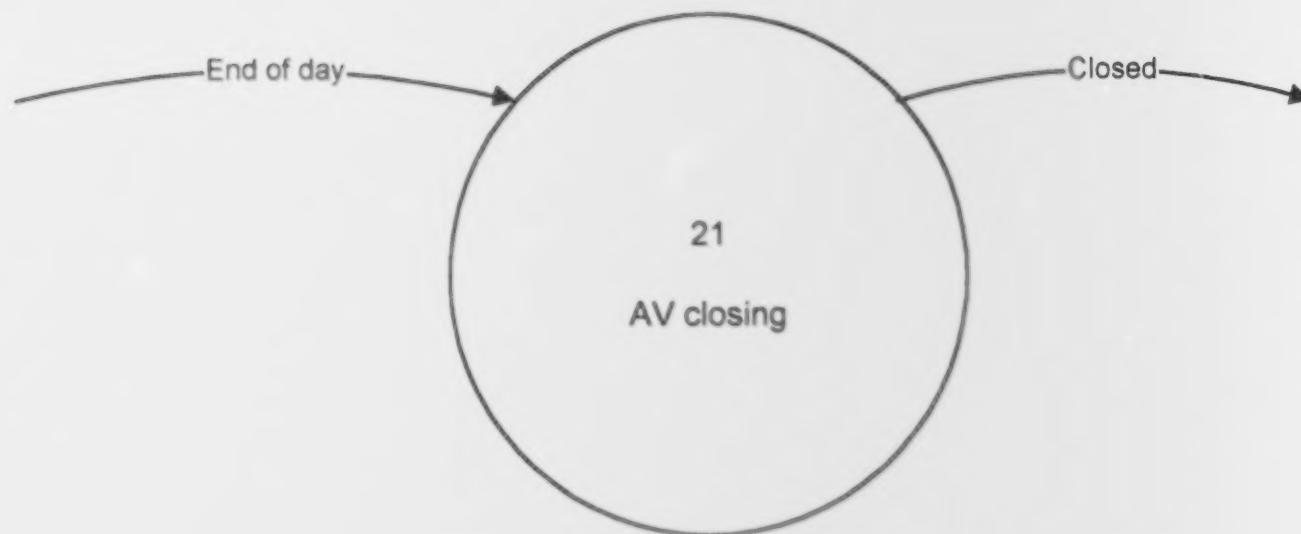
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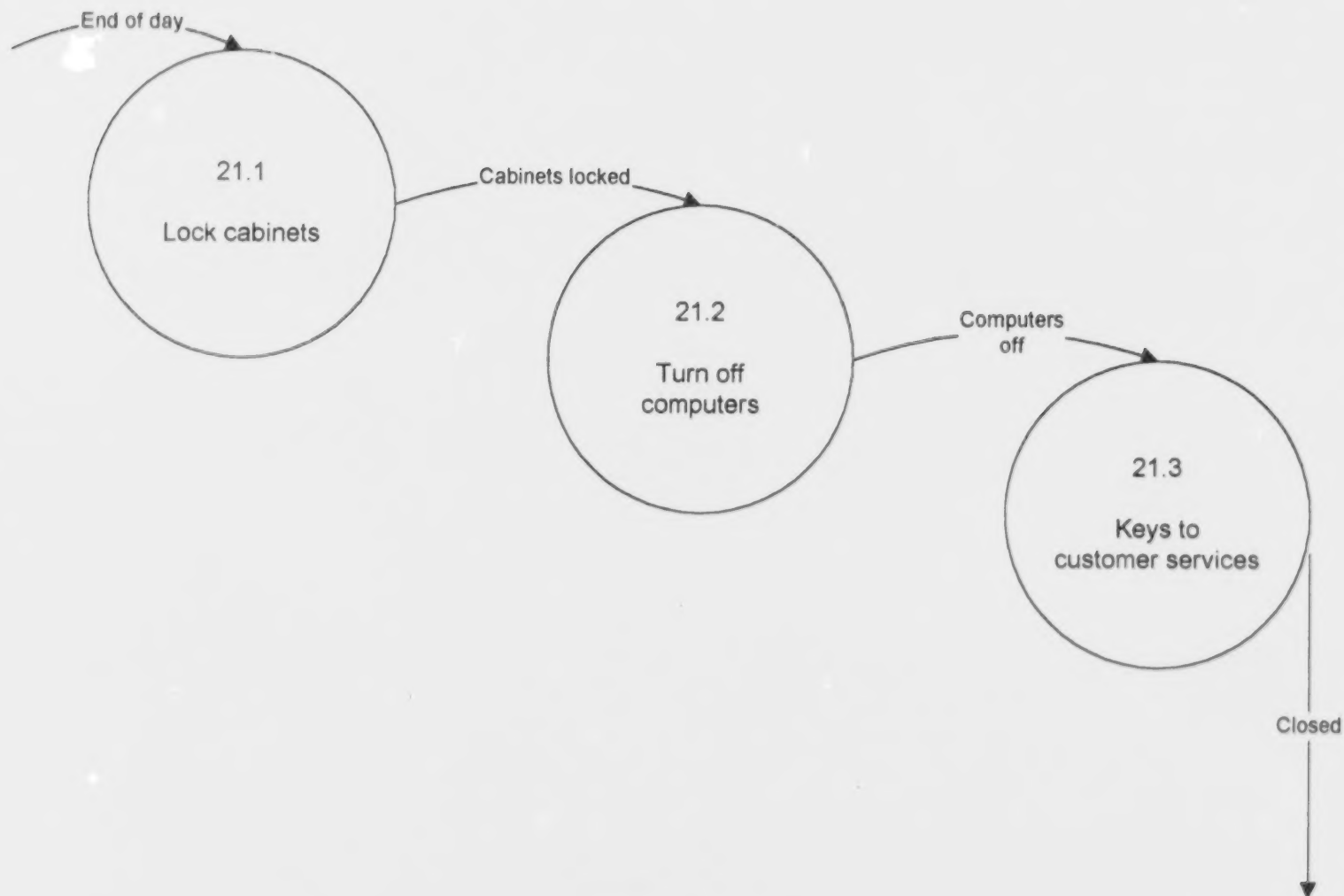
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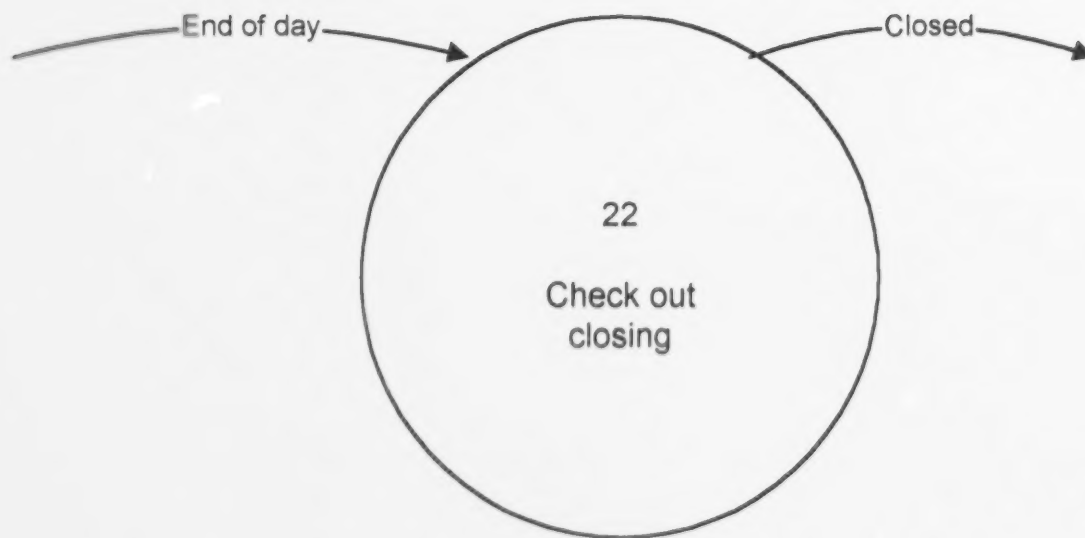


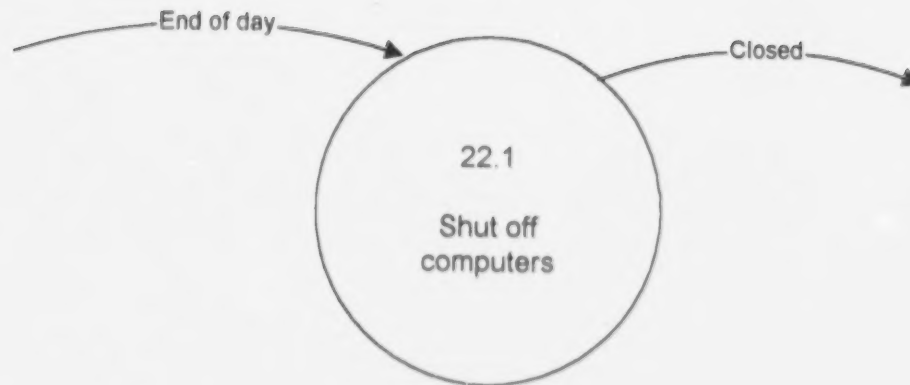


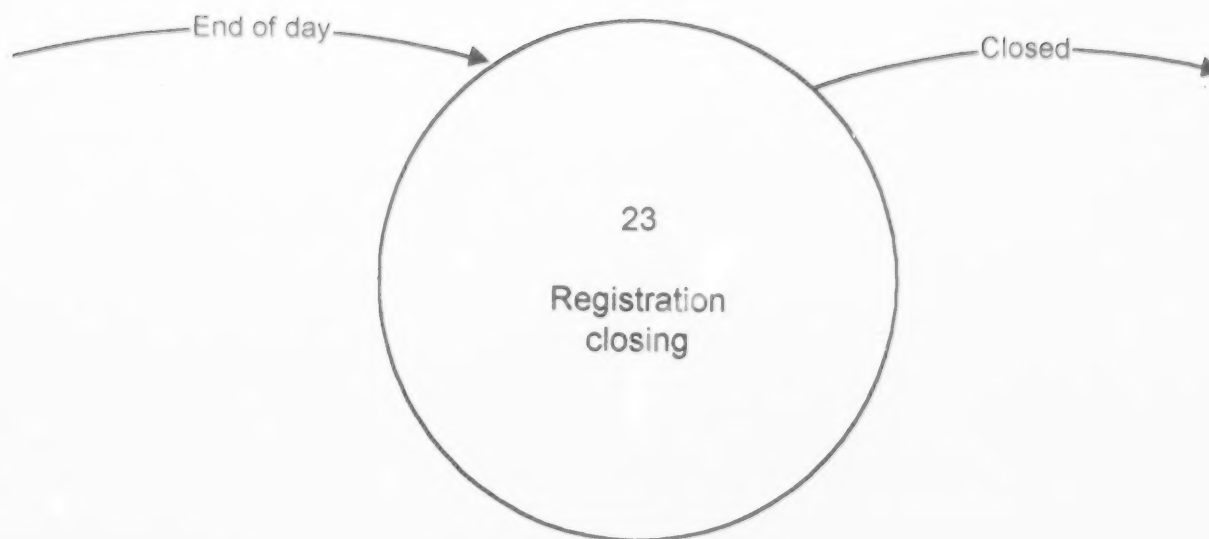


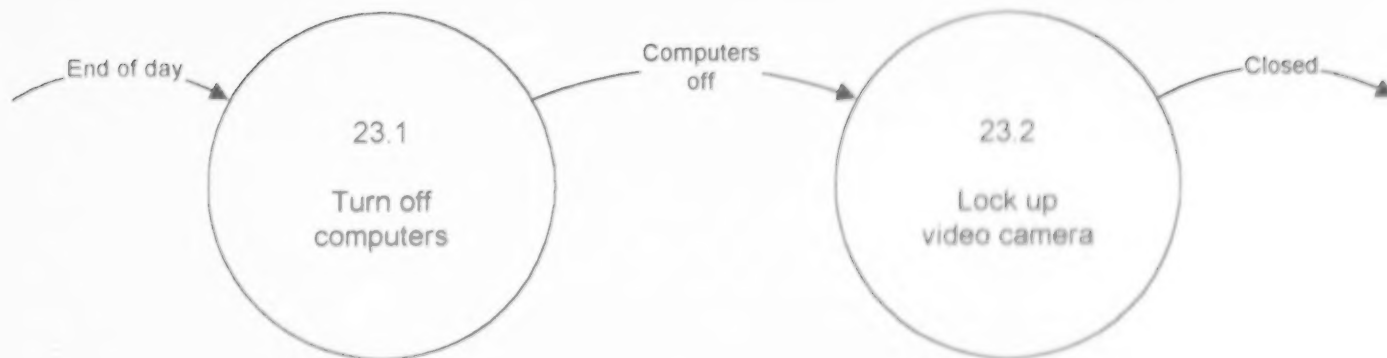




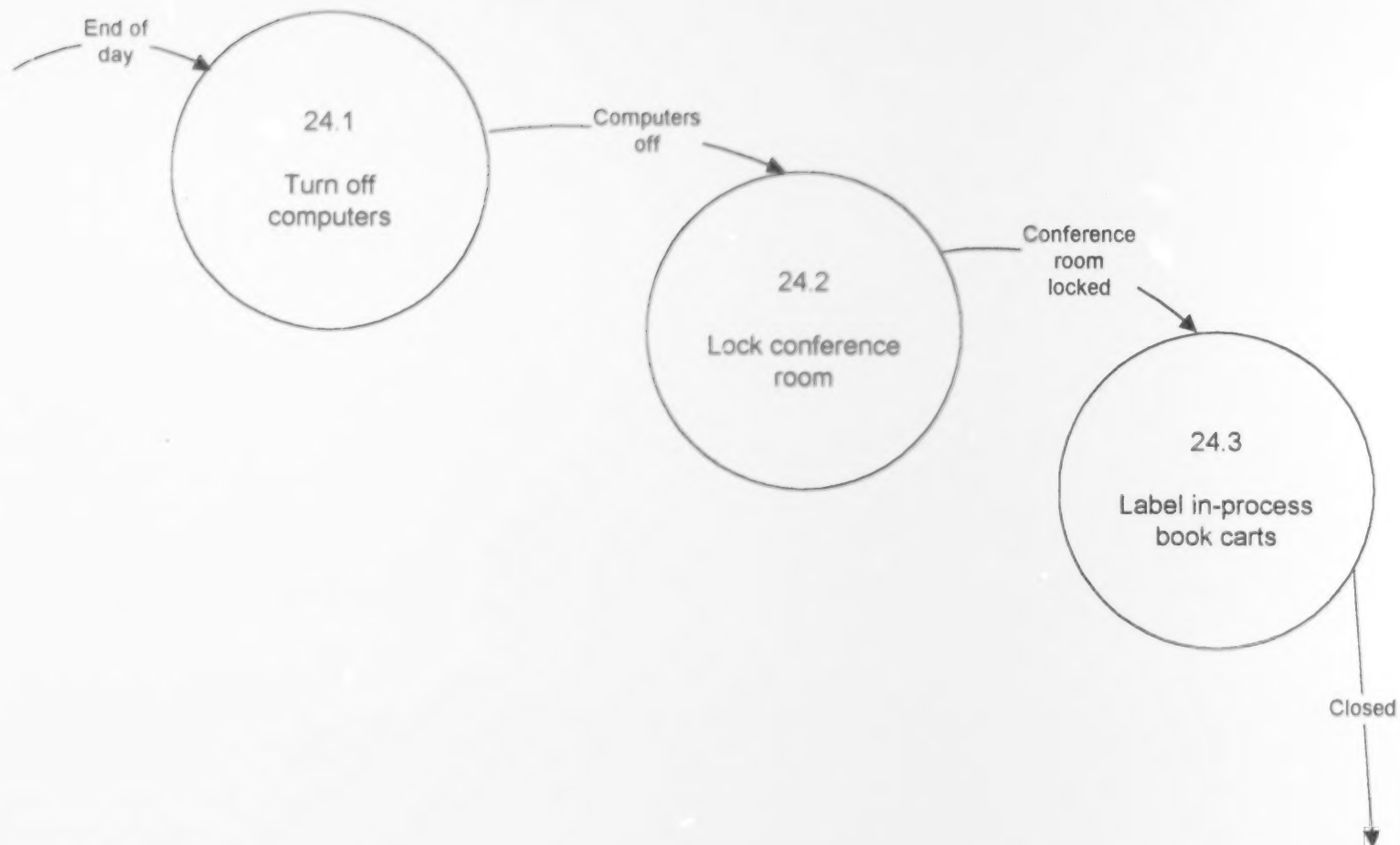


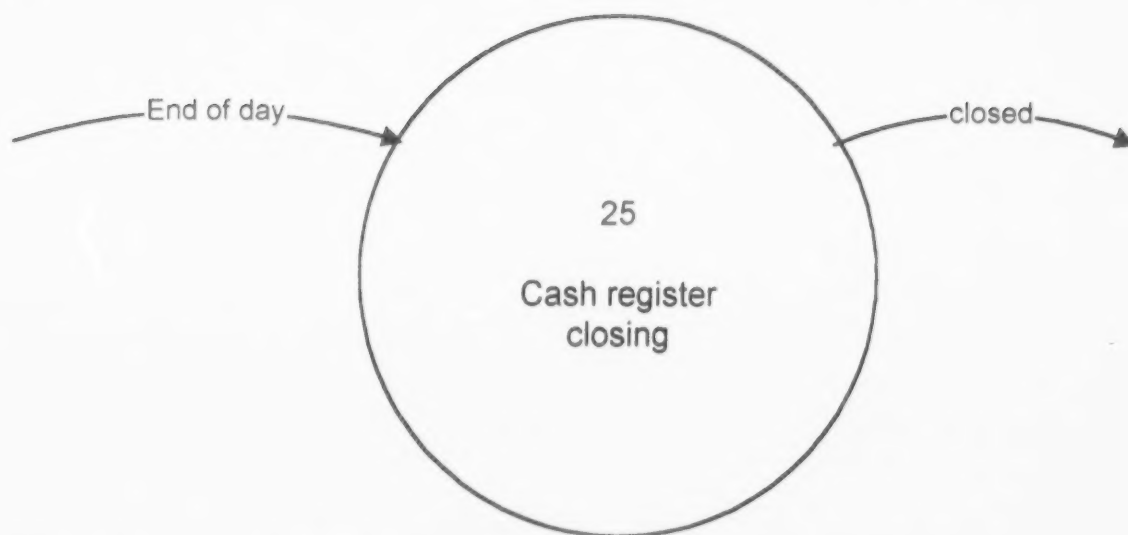


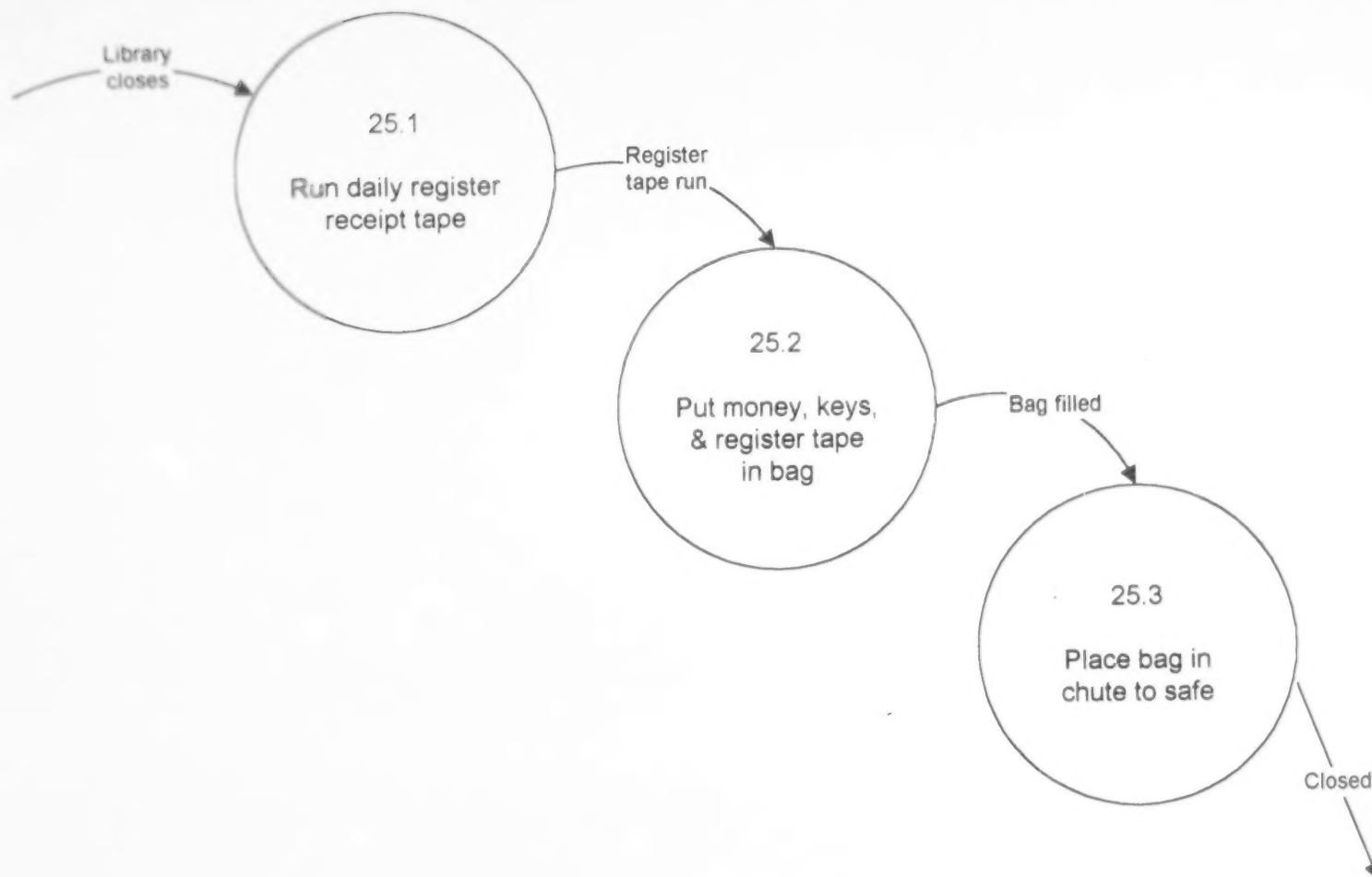


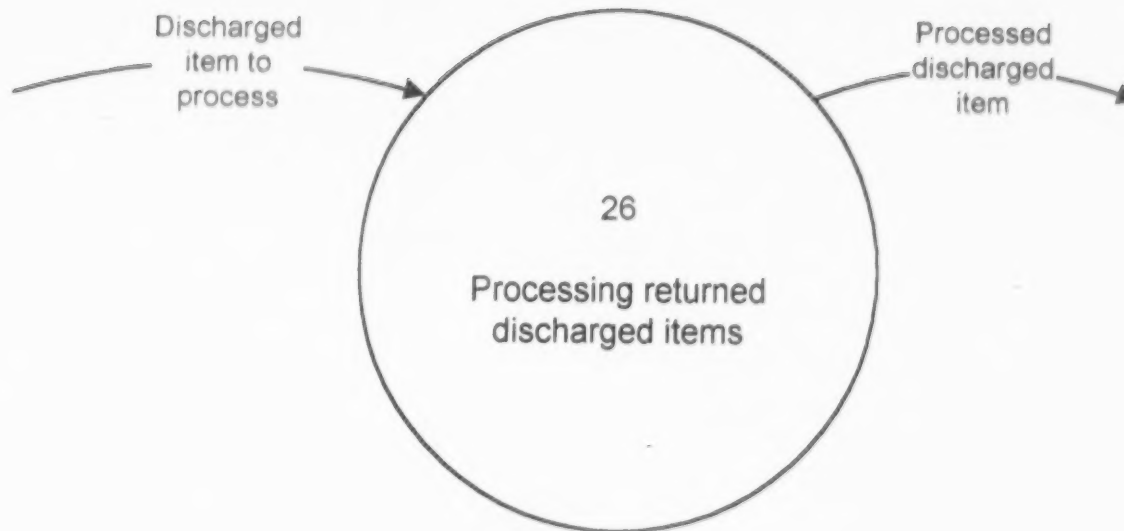


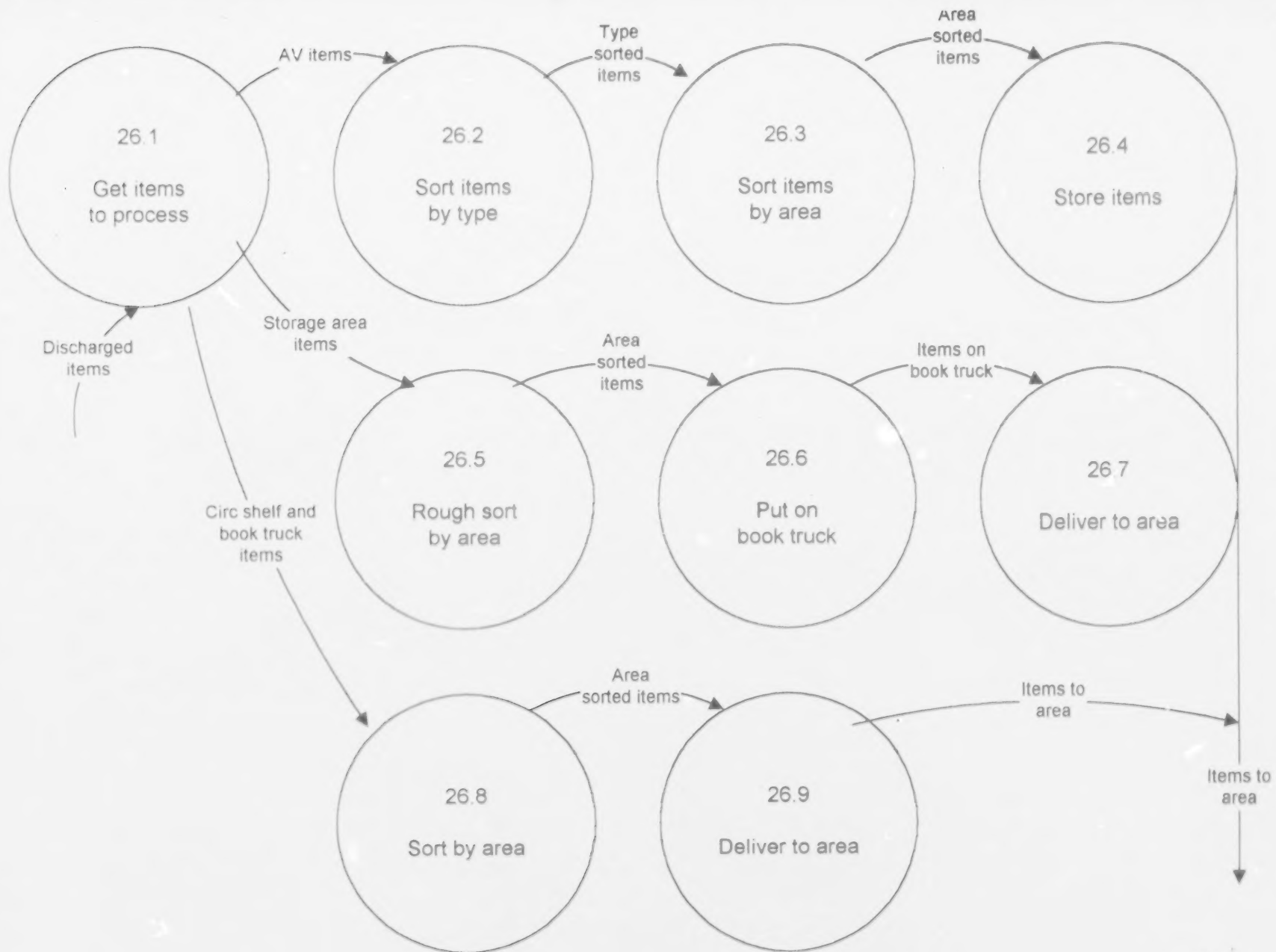






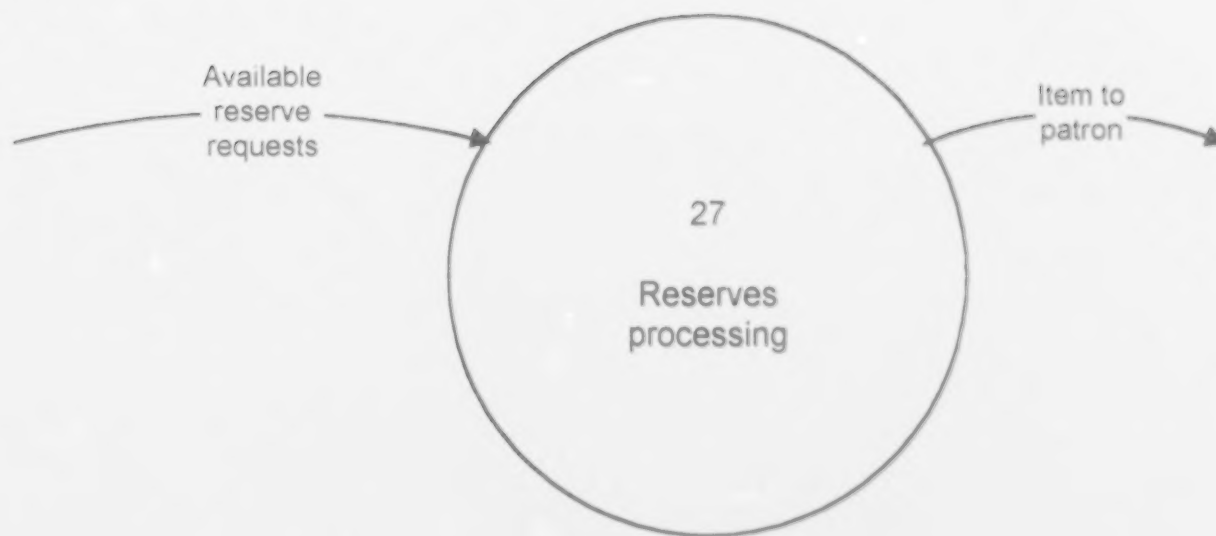


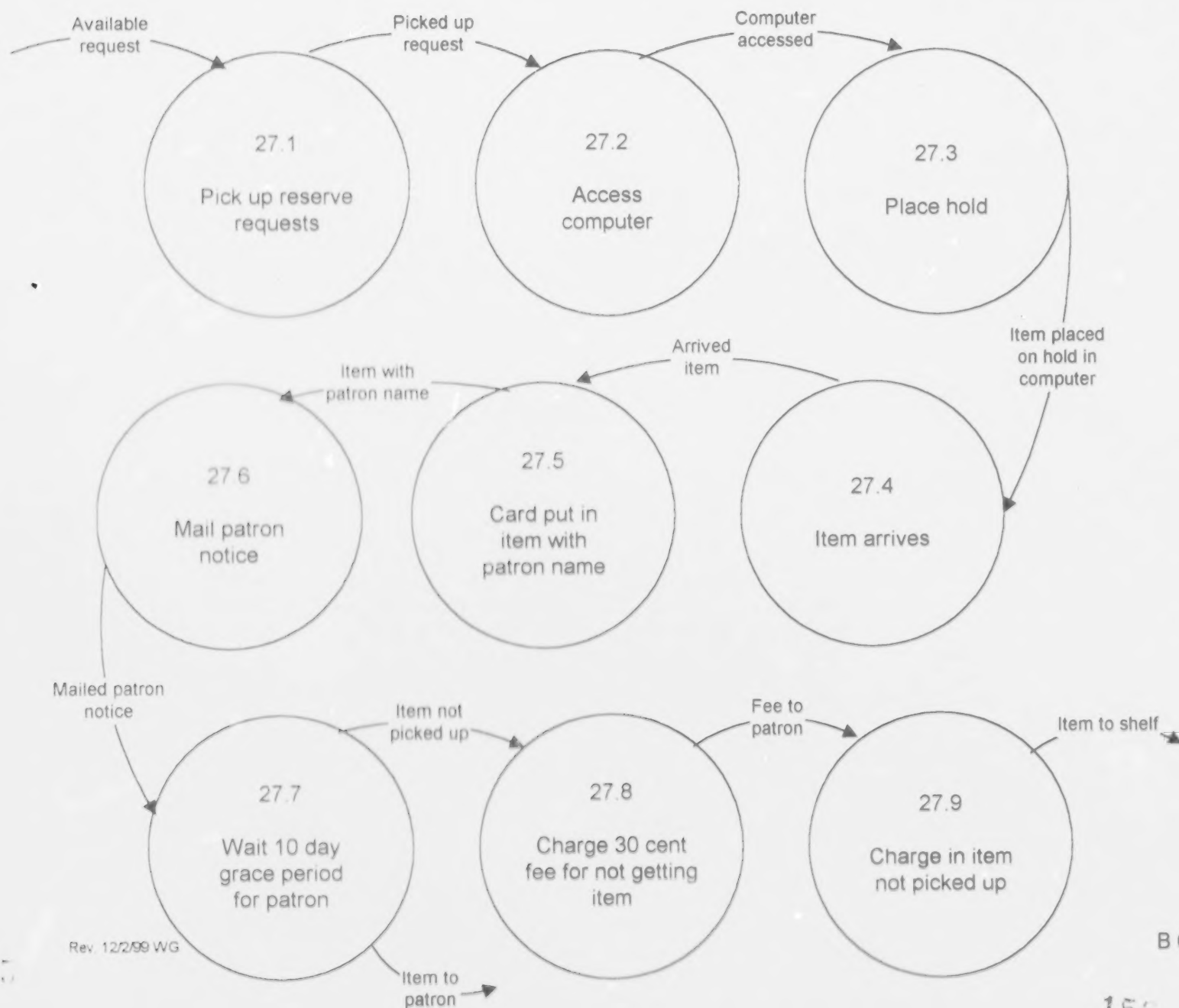




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